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H U M A N

R E S O U R C E S

LEVEL II

PRE-ENLISTMENT PERSON-JOB MATCH SYSTEM
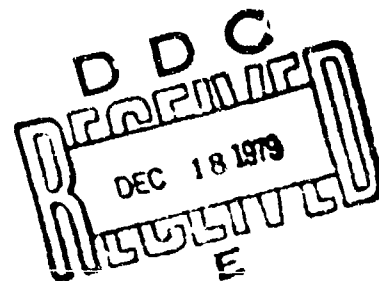
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Research discussed in this report involved the development of a computer based assignment system which became operational Air Force-wide 1 November 1976. The Person-Job-Match System was the computer algorithm which matched potential recruits with available jobs. This algorithm, when operationally implemented, became the assignment algorithm of the Air Force Advanced Personnel Data System's Procurement Management Information System (APDS/PROMIS). This report presents the assignment concept, methods of combining multiple objectives, the conceptual payoff equation, baseline performance data, and future directions anticipated.

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PREFACE

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PRE-ENLISTMENT PERSON-JOB MATCH SYSTEM

I. INTRODUCTION

The selection and placement of personnel within a large organization, in order to be effective, must consider a variety of factors. The properties of jobs have to be isolated, and in turn, personnel specifications based on the job requirements have to be established. The characteristics of people must also be considered. The people characteristics are usually tapped by a variety of means; such as interviews, tests, inventories, biographical information forms, and medical examinations. The assignment process, after job properties and people characteristics have been defined, involves matching people with jobs in some optimal fashion. In addition to the basic procedures, a selection and classification program, if it is to survive, must be acceptable to management and be adaptable to the dynamic changes that occur in organizations over time.

The Person-Job Match (PJM) system is a computer-based assignment system which matches applicants for enlistment in the Air Force with Air Force jobs, i.e., Air Force Specialties (AFSs). The system was designed to meet the requirements noted above. That is, it tends to assign individuals in an optimal manner, it is flexible in that new research data can be readily incorporated, it is fast, and it is a system that is supported by Air Force management personnel. An overview of the assignment system has been described by Ward, Haney, Hendrix, and Pina (1978).

This report focuses on the development of the PJM system, including its conception, implementation, and modification and on the establishment of its baseline performance characteristics.

Detailed aspects of this research effort have been reported by Hendrix and Ward (1975), Pina and Stifle (in-press), Ward (1977), and Ward and Hakman (1975). Concepts described by Ward and Davis (1963) contributed to these developments.

II. BACKGROUND

In December 1971, the Air Force implemented an assignments system for new enlistees which was called the Procurement Management Information System (PROMIS). The system was developed jointly by the Air Force Military Personnel Center (AFMPC)[1] and the Air Training Command and provided direct telephone contact between recruiters and the Recruiting Services Accession Control Center (ACC), which could enlist applicants up to 6 months in advance. In order to be considered for enlistment, applicants had to meet a series of minimum cutting scores obtained from medical and aptitude examinations. If an applicant met the minimum requirements for a job, then the recruiter would contact the ACC. If the job was available, then it could be reserved for the applicant.

The system worked rather well, but there were disadvantages. First, the time required for recruiter interaction with the ACC greatly exceeded the initial estimates. This resulted in the telephone lines becoming saturated with recruiters encountering a long delay before they could contact the ACC. Second, the assignment process did not approximate an optimal solution in that only minimum cutting scores were required. Third, the system did not provide recruiters with an up-to-the-minute status and management information (e.g., quotas were not immediately available upon request).

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[1] Now Air Force Manpower and Personnel Center.

With the possibility of a zero draft environment in the near future and because of recruiting advantages enjoyed by the Army, which had developed a computer-based assignment system (REQUEST), the Air Force became interested in developing a similar system. In July 1973, personnel from the Air Force Recruiting Service and the Air Force Human Resources Laboratory discussed the feasibility of a computer-based PJM system. The system as envisioned was to be based on multiple criteria, such as job satisfaction, job performance, and technical training success. As a result of this discussion, a small computer-based job reservation system was developed. The system was demonstrated to Air Force Recruiting Service in September 1973, and this resulted in the decision that a computer-based PJM system would be developed. The Air Force Human Resources Laboratory would serve as the prime developer of the PJM specifications, and AFMPC and the Recruiting Service would be responsible for procurement of the computer and development of the command language.

On 1 November 1976, the system became operational, with Air Force representatives at 66 Armed Forces Examining and Entrance Stations (AFEES) linked by remote terminals to a Burroughs 6700 computer located at Randolph AFB, Texas. The total system, which included the PJM program, was named the Advanced Personnel Data System's Procurement Management Information System (APDS-PROMIS).

III. PERSONNEL ASSIGNMENT CONCEPT

The general concept of a personnel selection and placement system is depicted in Figure 1. An overview of this approach was previously reported in Ward, Haney, Hendrix, and Pina (1978). The process involves, first, the establishment of a Job Properties Array which consists of attributes or characteristics associated with jobs. Next, a Person Characteristics array is established, consisting of those attributes of the individual applicants that can be linked to job criteria. Once these two arrays are available, the next step is to match the Job Properties with the People Characteristics
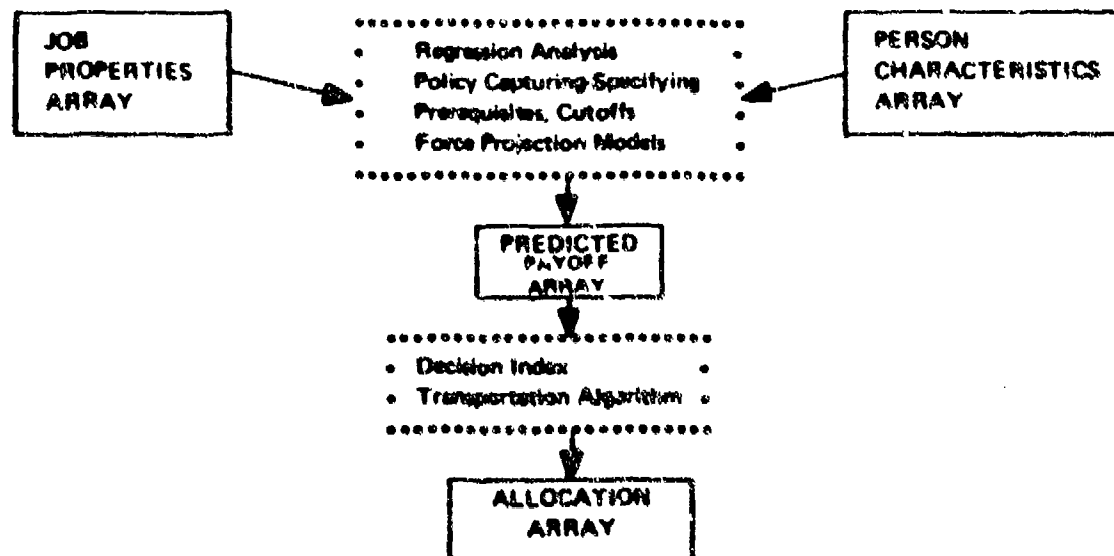
Figure 1. Summary of the Personnel Assignment System.

by some method, such as by linear regression or multiple cutoff techniques. This, in turn, gives a Predicted Payoff Array, with each cell representing the worth or payoff of a given individual in a given job.

Figure 2 presents an example of a Predicted Payoff Array. The assignment objective is to maximize the sum of the payoff values. For the example given in Figure 2, the optimal solution is indicated by the payoff values which are circled. The sum obtained is 15 (i.e., 6 + 5 + 4 = 15), which is the largest sum obtainable if each person is assigned to only one job and with no one job having more than one person assigned to it. As can be noted, an individual may not be assigned to his highest payoff job (e.g., Person 1 in Figure 2).

PREDICTED PAYOFF ARRAY   **ALLOCATION ARRAY**

	JOBS					**JOBS**		
	Job 1	Job 2	Job 3			Job 1	Job 2	Job 3
Person 1	8	7	(8)		Person 1	11.0	13.0	(14.0)
Person 2	(5)	1	0		Person 2	(14.0)	11.5	12.5
Person 3	6	(4)	1		Person 3	13.0	(13.5)	11.5

PERSONS (left of payoff array) PERSONS (left of allocation array)

The higher numbers in the Allocation Array reflect the desirability of assignments

for overall effectiveness of the Air Force

[Overall Effectiveness = 6 + 5 + 4 = 15]
When Highest
Allocation Indexes
Are Used

Figure 2. Example of Predicted Payoff Array and Allocation Array

Although the assignment process can be accomplished from the Predicted Payoff Array, it is frequently desirable to transform the array to an Allocation Array (see example in Figure 2). The end product is that the payoff values in the Predicted Payoff Array are transformed such that those closer to an optimal solution have larger numeral values than those less optimal in terms of maximization of the sum of the payoff values. Therefore, the payoff values of 6, 5, and 4 were transformed in the Allocation Array transformation process to 14.0, 14.0, and 13.5. The Allocation Array values represent the desirability of assignments for overall effectiveness.

The previous discussion is for the batch case involving a pool of individuals that is equal to or greater than the available job bank. However, in the Air Force the problem is somewhat different, because at any given point in time, a recruiter usually has only a small number of individuals available for assignment to a larger number of jobs. For this case, the process is one of assigning a single individual at a time to the available jobs and attempting to do so such, that, when all jobs are filled, the resulting array approximates an optimal assignment process. Throughout this report, this process is referred to as "sequential assignment" and is the basis for the PJM system.

IV. PERSONJOB MATCH ASSIGNMENT SYSTEM

During the development of the PJM system, the major problem involved two central issues associated with the payoff system. The first was in determining which components should be included in the payoff composite. The second was deciding how the payoff components should be weighted. Two major techniques were considered, namely, policy capturing and policy specifying, and the basis for selecting the policy-specifying technique as the payoff composite weighting method is discussed in the following paragraphs.

Policy Capturing and Policy Specifying

Research associated with policy capturing can be placed generally in two major categories. In one category, a "judge" is presented with a series of predictors, and each profile is to be rated or ranked on some quality, such as "goodness." In this first case, the predictors are explicitly defined, and the experimenter can decide which predictors to include as well as how many. In the second case, there are no explicitly defined predictors; however, the "judge" still rates or ranks the stimuli or stimulus object on a scale of some quality. An example of this would be for a "judge" to rate paintings on some quality, such as their beauty. Here, after the ratings have been performed, the experimenter is faced with establishing which characteristics make up the stimulus object, in this case the painting. The hypothesized predictors are then included in the regression equation with the respective beauty ratings made on the paintings. A literature review of policy capturing is provided in Appendix A.

Advantages and Disadvantages of Policy Capturing

As is indicated in the research literature (Appendix A), policy capturing has a number of associated advantages and disadvantages. On the positive side, policy capturing is an effective technique that can be applied in a wide variety of situations. Both individual policy capturing and group policy capturing can be accomplished quite effectively with a simple strictly linear model. Also, since individuals are usually rather consistent in applying their judgment process, their policy can be very reliably captured, with the R^2 values frequently being in the high .90s. In turn, the policy-capturing model holds up well upon cross-validation and can be used even more reliably in performing decisions than can the individual who was used initially to establish the policy. This phenomenon, called "bootstrapping" (Dawes, 1971), can be used to great advantage in many different settings. For example, policy capturing can be used very effectively in screening a large number of applicant records and reducing the pool to a more manageable size for use by a selection board. Also, judges as a group may have inaccurate insight into their decision-making processes. They frequently characterize their decision-making process as intuitive and highly complex. Through policy capturing, the specific variables they consider relevant can be identified and their policies captured very precisely in quantitative terms. This basic procedure can be used to reduce a large number of predictor variables (for example, 1000) to a smaller number of relevant variables which the judges can more easily, reliably, and economically use in their decision processes, or the policy-capturing model developed can be applied directly as the decision-making technique.

On the negative side, policy capturing requires a large number of profiles to be rated or ranked by a judge in order to reliably capture his policy (e.g., 150 to 200). This can be time-consuming, especially if the profiles must be rank-ordered, and the judges can tire of the lengthy process. Another major disadvantage of policy capturing is that the policy derived is not always acceptable to those individuals desiring development of the model (e.g., managers). Frequently, only three or four variables, combined with a strictly linear fit, are all that is required

to capture a judge's policy. Other individuals, such as managers, insist that people are more complex in arriving at decisions than is indicated by this rather simplistic model and therefore reject the concept. Another disadvantage is that certain types of decision tasks, by their very nature require a different process in weighing the predictors together to arrive at a final decision. For example, due to a variety of reasons, including legal, a manager may be required to select individuals for employment in his organization based on multiple criteria. These criteria might include potential for on-the-job success, increasing training success, maximizing tenure with the organization, and insuring that no subgroup is adversely affected by discrimination. Due to these disadvantages, a new technique, which is more in-line with management's view, has been developed by the Air Force Human Resources Laboratory. This technique is referred to as policy specifying.

Policy Specifying

The development of the PJM system required that applicants for enlistment be optimally assigned to jobs within the goals and constraints established by the Air Force. The policy specifying technique (Ward, 1977) was designed to accomplish this objective. Detailed Opportunity specifications are provided in Appendix B.

In applying the policy specifying technique, the first step was to identify the organizational goals and constraints. This was done for the Pre-Enlistment PJM System through a review of official documents and a series of meetings with Air Force management personnel. Some of the goals were explicitly stated, others were implied. The next step involved a thorough review of research data associated with the organizational goals. For example, research literature that discusses the type of individual who would be most likely to reenlist would be relevant to a goal of decreasing attrition. The goals and constraints reflecting the position of management were isolated, and along with the associated supporting research data, they were presented to management for final approval. The goals, constraints, and assumptions approved for the Pre-Enlistment PJM system were as follows: (a) some jobs must be filled, (b) it is desirable to more evenly distribute minority talent across Air Force Specialties, (c) a person with *minimum aptitude or potential* is worth the most in the *lowest difficulty* Air Force Specialties, and a person with the *highest aptitude or potential* is worth the most in the *highest difficulty* Air Force Specialties, (d) more accurate prediction of technical school success is desirable for assignment purposes, (e) reducing attrition is desirable, and (f) recruits' job satisfaction should be increased.

With the goals, constraints, and associated research data clearly established, the next step involved the development of the payoff model through policy specifying. The payoff model produces numerical payoff values indicating the worth of an individual on a job. The basic payoff model developed can be stated as

$$Y = W_0 Y_0 + W_{11} Y_{11} + W_{12} Y_{12} + W_{13} Y_{13} + W_2 Y_2 + W_3 Y_3$$

where

Y = Payoff value of a person assigned to a particular job; a summation of six separate components designed to meet the indicated goals and constraints

Y_0 = Constant Fill component; assures that a minimum percentage of the particular job quota will be filled as a function of the proportion of maximum payoff that the constant fill component represents (item a in the preceding paragraph)

Y_{11} = Aptitude Difficulty component; a composite function of the two variables, applicant aptitude and job difficulty, derived by policy specifying (item c)

Y_{12} = Technical School Success component: a prediction of final technical school grades based on a regression of final grades of previous graduates on their aptitude test scores, high school graduation status, and high school courses taken (items d and e).

Y_{13} = Area Preference component: an adjustable constant added to each job within an aptitude area based on relative preference weights which the applicant specifies by area (item f).

Y_2 = Variable Fill component: a function of time left until a particular date of enlistment and of the proportion of a specific job quota which has been filled for that date. Payoffs are increased as the deadline approaches, more or less rapidly for low or high fill proportion (item a).

Y_3 = Minority/Non-Minority component: a function of percent minority/non-minority representation in a given job (Air Force Specialty) which increases the payoff for jobs with lower than average representation (item b).

This model demonstrates two types of policy specifying, one nested within the other. The weighting coefficients, W_0, W_{11} . . . . . assure that the maximum payoff is 1000 and control the relative importance or priorities of the six components. These weights are specified by managers and policy makers within the constraints of the model: the maximum value of each component of payoff multiplied by its weight must be such that the sum of the weighted component maxima is 1000. The weighting policy or strategy can be arrived at iteratively as experience with the system increases. The Aptitude-Difficulty, Variable Fill, and Minority/Non-Minority components are developed indirectly, as in policy capturing, through specifying certain critical values and the general shape of the component model. The general specifications are translated into ranges of independent and dependent variables, boundary values of the dependent variable, boundary values of derivatives, locations of maxima, minima and inflection points; and the maximum polynomial power in each independent variable. These precise mathematical statements which constrain the form of the general polynomial are imposed as restrictions on the model. The exact model is derived through the solution of a set of simultaneous linear equations, linear in the coefficients, which are in turn derived from the specification statements. An exact, consistent solution for the model coefficients requires the number of independent specification equations to be equal to the number of unknown coefficients

Only two of the components in the payoff model are interactive components: the Aptitude-Difficulty component and the Variable Fill component. These two components will now be presented as examples of the indirect policy specifying procedure described above.

Aptitude-Difficulty Component

The specifications for the Aptitude-Difficulty component are as follows

1. The range of component payoff values will be 0 to 100.

2. Values for a given difficulty will increase at a constant rate (linearly) as aptitude increases.

3. Persons between the extreme qualifying aptitudes (40 to 95) will have their maximum payoff values for difficulties equal to or slightly less than their aptitudes.

4. Values of zero will be assigned when aptitude is about 15 or 20 points below the difficulty index for a particular job.

5. A value of 15 will be assigned when a person of minimum qualifying aptitude (40) is assigned to a job of minimum difficulty (40).

6. A person of minimum aptitude (40) will have a maximum payoff of 15 at the minimum difficulty (40) and decrease gradually as difficulty increases reaching payoff value of 0 at a difficulty of about 60.

7. A value of 100 will be assigned when a person with maximum aptitude (95) is assigned to a job of maximum difficulty (100).

8. A value of 35 will be assigned when a person of maximum aptitude '95) is assigned to a job of minimum difficulty (40).

9. A person of maximum aptitude (95) will have a maximum payoff (100) when assigned to a job of maximum difficulty (100). The values for this person will increase gradually from 35 at the minimum difficulty (40) and have a maximum (100) at the maximum difficulty (100).

10. A as difficulty increases, payoff values for a given aptitude will increase at an increasing rate (curvilinearly) from a minimum difficulty leveling off at the corresponding maximum payoff value and dropping off rapidly beyond the maximum.

These specifications can be more precisely stated in mathematical notation:

$$Y_{11} = f(A,D); \quad Y_{11} = 0\ldots 100, \quad A = 40\ldots 95, \quad D = 40\ldots 100 \text{ (item 1)}$$

$$Y_{11} = \begin{cases} 15 & A = 40, D = 40 \text{ (item 4)} \\ 35 & A = 95, D = 40 \text{ (item 5)} \\ 100 & A = 95, D = 100 \text{ (item 2)} \\ -250 & A = 40, D = 100 \text{ (items 3, 7)} \end{cases}$$

$$\frac{\partial Y_{11}}{\partial D} = \begin{cases} & \text{All } A = 40, \ldots, 95 \; D = 40 \text{ (items 6, 7, 8)} \\ 0 & \\ & A = 95, D = 100 \text{ (items 6, 8)} \end{cases}$$

$$\frac{\partial^2 Y_{11}}{\partial D^2} = \begin{cases} <0 & A = 95, D = 100 \text{ (item 6)} \\ >0 & \text{All } A(40, \ldots, 95), D = 40 \text{ (item 7)} \end{cases}$$

Max exponent order for A: 1 (item 9)

Max exponent order for D: 3 (item 10)

Coefficients to be evaluated: 8.

$$Y^{11} = 35 + .05417(D - 40)^2 - .0006019(D - 40)^3$$
$$+ .3636(A - 95) + .0009848(A - 95)(D - 40)^2$$
$$+ .00001136(A - 95)(D - 40)^3$$

Remaining coefficient values: 0.

A three-dimensional view of the Aptitude-Difficulty component is depicted in Figure 3. As can be seen, a person with a low aptitude level is worth the most on the lower difficulty jobs, while a person with a high aptitude level is worth the most on the higher difficulty jobs. For any difficulty level, an individual with a higher aptitude level will have a higher payoff value than an individual with a lower aptitude level.
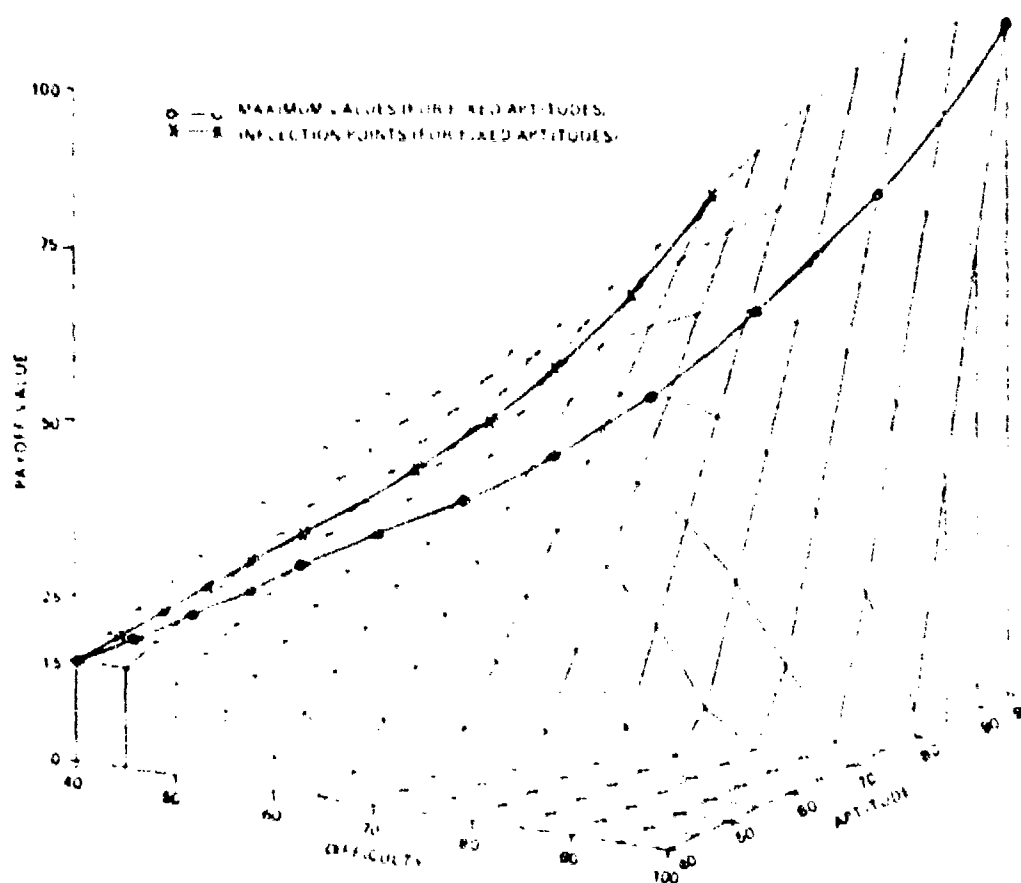
Figure 4 Payoff Function of Aptitude and Difficulty

Variable Fill Component

The variable fill component is a dynamic function which senses the rate of fill for a given specialty and increases the component's weight if not filling at the desired rate and decreases it if filling faster than the desired rate. Specifically, the component reflects the interaction between percentage of jobs filled, the amount of time since the job was released, and a priority associated with each job. The priority value is established in terms of how difficult a job is to fill. A high priority value would reflect a job that is difficult to fill, and a low priority value would be one that is easy to fill. This component is depicted in Figure 4 for a priority (k) = 25. The variable fill component is presently in the process of being modified to reflect the actual *number* of unfilled jobs interacting with the other three job properties: percentage fill, time, and priority.

Other Pay-Off Components

The remaining payoff components are non-interacting components whose characteristics are specified in Appendix B.
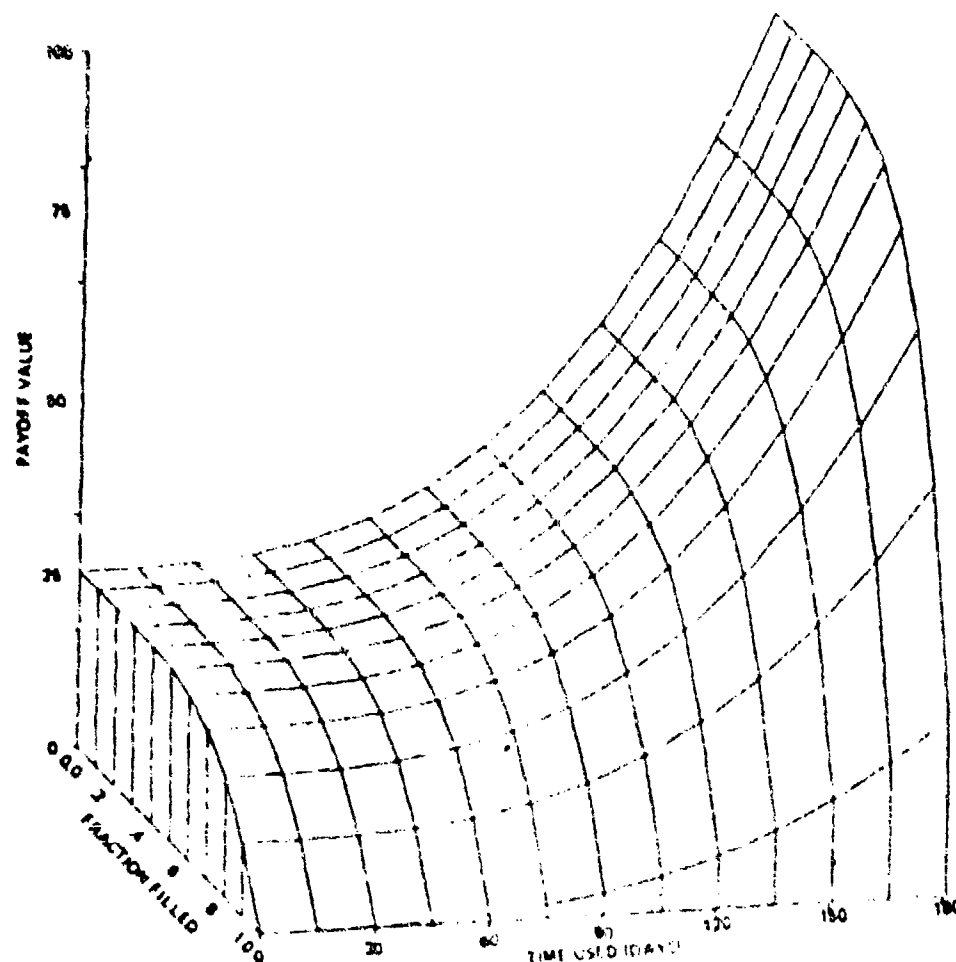
Figure 4. Payoff Function of Fraction Filled and Time Used

Optimal Assignment Based on Payoff Values

The payoff generating system accomplishes a melding of the characteristics of persons with the properties of jobs to provide for each individual a measure of the expected effectiveness to the Air Force for being assigned to each specific, available job. This measure is independent of payoffs for competing jobs to which the individual might be assigned and of competing individuals who could be assigned to the particular job. The value to the Air Force of a group of assignments, as illustrated in the concept section, would be the sum of the individual, independent payoffs. The optimum value for the Air Force is then the maximum possible sum. Since an individual can be assigned to only one job and since a job opening can be filled by only one person, individuals to be assigned and jobs to be filled must be considered as a whole, or batch, in selecting the set of person-job combinations whose payoffs equal the maximum total value.

A number of techniques are available which can find the optimum assignment solution for a batch problem, typically several individuals and several jobs. These range from inspection, or trial-and-error, to sophisticated linear programming techniques. The latter are the more effective, varying in their general applicability, the size of problem they can handle, and the speed with which they can be solved by computer. They result in an index by which the persons and jobs should be allocated to achieve the optimum solution, giving the optimum evaluation of the payoff

sum or objective function. The allocation process may not always assign a person to the job for which the person's payoff is highest. For most techniques, the allocation array will contain values of one when the assignments result in the maximum overall payoff and zero when the assignments are non-optimum. Such solution processes are readily adaptable to batch problems of any size.

The Air Force recruiting process, while involving many persons and many jobs, does not represent a pure batch problem. As discussed in an earlier section, applicants for enlistments are processed sequentially, essentially on a first in first out basis. Applicants are interviewed and examined for mental, physical, and moral qualifications for Air Force enlistment. Once these steps are complete, each applicant is offered a job or selection of jobs from which to choose an assignment classification. Applicants arriving for qualification screening represent a random process. The time required to complete the qualification steps is also random, with certain predetermined components. Thus, applicants arriving at the job reservation stage also represent a random process, again with certain systematic components. It is the objective of APDS/PROMIS to optimally assign applicants to job classifications as they complete the qualification procedures. Since these completion times are random, applicants must be processed one at a time. This type of problem is referred to as the secretary problem in operations research literature (Wagner, 1975).

Although the Air Force recruiting process over time, matches many people and many jobs, it is sequential in nature, and the traditional batch solution techniques cannot be applied. Rather, some approximation procedure must be adopted which can produce an allocation index in the sequential, random process environment of Air Force job reservation. The procedure chosen for the initial operational version of APDS/PROMIS is a modification of the Decision Index (DI) discussed by Ward, 1959. DI is an approximation technique for a batch assignment problem. It yields an allocation index with a range of numeric values (rather than zero, one). The largest value represents the best approximation for the optimum assignment for a person (or a job). The batch solution is reached by assigning successively the remaining largest DI for rows and columns not already covered. For a batch problem with N persons to be assigned to N jobs, the DI is the mean value of the (N-1)! possible solutions which include the corresponding person-job combination.

The original DI is computed by subtracting the corresponding row and column means from each payoff (and adding the grand mean). The DI is thus a double deviation form of the payoff or mean objective function (depending on the divisor or denominator value). The point to be observed is that comparisons among the DIs for one person's entire row require only the payoffs for that individual and the job or column mean values. The DIs computed for a row can be used to identify the best estimate of the optimal job for the person and can further be used to order all jobs in descending degree of approximate optimality. In the batch mode, the DI does not have to be recomputed if an external factor causes a particular match to be disallowed.

The ordering property and the column mean summarization property make the DI doubly amenable to the Air Force recruiting PJM problem. Not only is the job reservation process a random process of assigning individuals one at a time against an uncertain, dynamic pool of applicants, but the policy of Air Force Recruiting Service is to present applicants with a list of the most nearly optimal jobs from which to choose. The uncertainty of the applicant pool requires some means of estimation or prediction of the remainder of the applicant pool against which each individual is to be compared. In batch techniques, this would require estimation of all remaining rows, representing all other individuals, of the payoff matrix. The DI requires only the estimation of column or job means. To produce an ordered list using batch procedures requires successive post-optimal operations, removing the optimum from each previous solution and recomputing the resulting optimum. The ordered list is inherent in the DI values; no recomputing is required.

While the DI is computationally simpler than a batch process, it is also an approximate optimum solution. The batch process produces an optimum solution. The batch process might be

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expected to produce more nearly optimal assignments over time than the DI. The trade-off would be between the greater computational expense of the batch over the DI and the greater accuracy. The accuracy of the DI might be sufficient to justify the cost savings. In the initial operational PJM system, the DI was chosen both for speed and computational parsimony. The accuracy comparison is not altogether clear because of the differences in estimation requirements between the DI and the batch.

The stochastic nature of the job reservation process requires any solution procedure to operate sequentially on the basis of incomplete, uncertain information. To arrive at an optimal PJM for an applicant, that individual must be compared with all other competing individuals. The random process of arrivals for job reservation makes even the definition of the competing applicant pool uncertain. Those who arrived earlier are no longer competing, since they have already reserved a job, but earlier arrivals were competing with the current individual before they reserved a job. The current individual is logically competing with all future arrivals out to the time horizon of jobs that are currently available. All individuals compete only for jobs available from the time of their arrival forward.

Since jobs are made available as of specific dates which are distributed over the time horizon, the dimensionality of the assignment problem becomes very large. Jobs in a specific specialty might be available for every date of enlistment from the present to the time horizon (initially 7 months, eventually to be 12 months), for a high volume (many openings) specialty. Jobs in a low volume specialty would be available only on occasional dates of enlistment which might be grouped to match starting times for technical training. The APDS/PROMIS system has been designed to group identical jobs by the month in which enlistment is to occur. This serves to reduce dimensionality of the assignment problem, allowing simplification of certain computational procedures, and to coincide with the management control periods used by the Recruiting Service. A job is considered only in the first month during which it is available after the date on which the individual states as his or her availability date. This further reduces dimensionality and reduces search time in computation. The first available date procedure also coincides with recruiting management policy, which is filling jobs nearer the current date before those of later dates.

The grouping of jobs by month provides a consistent, although arbitrary, justification for grouping applicants. While applicants would logically be considered for all jobs beyond their arrival date, limiting the search for a particular job to its first month of availability also limits the applicant pool in which individuals compete. The structuring of both jobs and applicants into monthly groupings also provides a rationale for computing and forecasting the column mean values for the DI computations. The applicant is thought of as competing with those other individuals who arrive for job reservation during the same calendar month. Column means can be computed after the fact from data on all arrivals during each month. Various forms of monthly data, payoff variables, payoff components, or actual payoffs could be used either in computing column means (i.e., variables or components could be forecast and then combined into column means) or column means could be computed and forecast directly.

Forecasting Column (Job) Means

In order to obtain the column (job) means needed to attempt optimization of assignment using the DI, a series of research efforts has been initiated. The first effort (Hendrix, 1976) investigated the feasibility of forecasting the Air Force applicant pool talent in terms of quality variables (i.e., the aptitude score means and standard deviations) and quantity (i.e., the total number of applicants).

In developing the initial applicant pool forecast model, certain Air Force management constraints and goals were considered. The model had to permit a forecast of the quality and

quantity of the applicant pool by the sex of the applicant and by aptitude area. Therefore, different equations were generated for each combination of the two factors. In addition, the forecast had to project the estimated pool up to 7 months into the future, since recruits could be given assignments that far in advance.

Basic Model

The basic model developed was a time series analysis model and can be stated as

$$Y = TSCI$$

where

Y = the value to be forecasted

T = the trend value

S = the seasonal component

C = the cyclical component

I = other irregular influences not predictable

The data used to develop the model consisted of means, standard deviations, and total number of applicants taking the Airman Qualifying Examination for entry into the Air Force during 1971 through 1974. Once these were obtained, the first 2 years (1971 - 1972) were used to develop the model and then the last 2 years (1973 - 1974) were used to test the accuracy of the model by forecasting each month over the 2-year period.

The trend value (T) was obtained by fitting a least squares line during a series of months, (e.g. 6 months and 12 months) to obtain the forecasted value for 1 month in advance (next month) and also for up to 7 months in the future. The seasonal component was obtained by the Ratio to Trend Method. The seasonal period used for the model was 1 year, therefore, differences for each month across years were obtained. The computations involved in obtaining the Ratio to Trend seasonal component involved dividing the actual observed value (i.e. mean, standard deviation, or N) by the estimated value obtained from a least squares fit for a 1 year period. Then for each month across all years (i.e. 1971, 1972) these are averaged in an attempt to remove chance variation. This component when multiplied with the trend value resulted in an adjusted trend value due to seasonal influence.

The cyclical component (C) is a predictable cycle which is longer than the seasonal one. That is, the cyclical influence would be a cycle which has a duration longer than 1 year. During the initial analysis of the data, it was determined by plotting the data that the cyclical component could not be predicted, therefore, the model was reduced to

$$Y = TS$$

The results indicated that the simple time series forecast system was rather accurate in predicting the quality and quantity indices. For example, the mean absolute deviations and squared deviation for Mechanical Aptitude mean value for males across the years 1973 and 1974 were less than one percentage point on the aptitude score scale which ranges from the 5th percentile to the 95th percentile.

This example was typical of all forecast mean values (i.e., for males and females in the four aptitude areas). This was also typical of the results for forecasting standard deviation scores. That is, they could be forecast over a 2-year period with an average (mean) absolute and squared absolute deviation of less than one percentage point.

This was not the case when the total number of applicants per month was forecast. The accuracy in forecasting, as indicated by the absolute deviation and squared absolute deviation, was

not nearly as good for total number of applicants as it was for aptitude means and standard deviations. For example, predicting an N of 6,000 might typically result in an error of 600 or more applicants. In some cases, the errors of predictions were even more extreme.

The accuracy of forecasting column means is critical to optimally assigning applicants in a sequential process. The efforts at forecasting variables independently and then combining these multiple time-series into the column mean values often led to questionable forecasts. The column means, computed by month after the fact, actually represent a random process themselves. Uncertainties in estimating individual payoffs and the random arrival process combine to make the column means random. However, a central limit theorem effect suggests that the column means, consisting of sums of random variables, should form a more acceptable time series than do the component variables. A historical time series is being used to investigate this approach. The non-dynamic components of the payoff, i.e., aptitude-difficulty, technical school success, and constant fill, are computed for enlistees who were processed over a 5-year period prior to APDS.PROMIS implementation. The individual payoffs are grouped by month and a monthly time series of column means is computed for all jobs which can be offered to enlistees.

The historical time series data will be analyzed using various techniques, including the type mentioned in the previous paragraph. The longer time span should allow more accurate estimates of seasonal patterns. Other techniques are being investigated, including Kalman filtering and exponential smoothing. These techniques offer the advantage of being recursive; they require retention of a minimum number of past observations to generate new forecast values. Such a technique can readily be implemented as part of the operational system. Kalman filtering is a technique from optimal estimation theory and can automatically adjust model parameters as well as forecast values (Gelb, 1974).

Now that the system is operational, data derived from operational PJM system files are presently being stored for use in further developing the PJM forecast system. Once an adequate data base of system-generated payoff values is established, the historical time series and the system generated time series will be integrated. Time series, exponential smoothing, and Kalman filtering techniques will be tested and evaluated for effectiveness in developing the ultimate forecasting system.

The present method being utilized for establishing column means was born out of necessity since no system data existed prior to implementation. Presently the payoff values are computed by considering for a given AFS the cutting score value of the Airman Qualification Examination (AQE) composite of the Armed Services Vocational Aptitude Battery (ASVAB), the AFS difficulty level, and the frequency of individuals for each aptitude score level. For each AFS, a minimum cutting score for eligibility has been established by the Air Force. During the generation of an individual's payoff value, the aptitude score is combined with a difficulty level established for each AFS, so the difficulty level has to be considered in the column mean prediction formula. In addition, the number of individuals obtaining certain aptitude scores for each major aptitude area Mechanical (M), Administrative (A), General (G), and Electronics (E) are summed. Specifically, the predicted column mean is computed as follows

Let C =   minimum cutoff score value for given AFS

      A =   aptitude score of individual (01-35, 40, 45, ..., 90, 95)

      D =   difficulty level for a given AFS (40-100)

      Y_{11A} =   portion of the payoff index which is generated for a given AFS of difficulty (D) at aptitude level (A).

      f_A =   number of individuals whose AQI score is A (A = 01, 05, 10, ...95)

$$\Sigma Y_{11} = \sum_{A=0}^{A<C} (f_A * 0) + [(f_{A=C} * Y_{11C}) + \ldots + (f_{A=95} * Y_{1195})]$$

17

$$\overline{Y}_{11} = \frac{\Sigma Y_{11}}{\Sigma f} \cdot wt_{11}$$

Predicted column mean = $\overline{Y}_{11}$ + constant, where wt_{11} was 1.00 initially, but has been modified and is presently 2.50.

The following example using numerical data should help clarify the predicted column payoff computations

For an Administrative AFS (A-AFS) whose cutoff requirement is an Administrative AQE (A-AQE) score of 60 and a difficulty level of 70, the following computations are

$$Y_{11} = CO + CI(A-95)$$

and for an AFS with a difficulty of 70, CO = 67.5 and CI = 1.5568.

The following distribution is the number of personnel whose A-AQE score is as follows

A-AQE (A)	frequency (f)
5-35	3,873
40	1,833
45	1,879
50	2,412
55	2,937
60	3,237
65	2,519
70	2,856
75	1,968
80	2,255
85	1,706
90	1,628
95	1,516
Total	30,619

$$\Sigma Y_{11_A} = (f_{A-60} \cdot 0) + (f_{A-60} \cdot Y_{11_{60}}) + \ldots + (f_{A-95} \cdot Y_{11_{95}})$$

all A

Since

For each A-AQE (A)

5-35 $f_{5-35} \cdot Y_{11_{5-35}} = 0$

40 $f_{40} \cdot Y_{11_{40}} = 0$

45 $f_{45} \cdot Y_{11_{45}} = 0$

50 $f_{50} \cdot Y_{11_{50}} = 0$

55 $f_{55} \cdot Y_{11_{55}} = 0$

60 $f_{60} \cdot Y_{11_{60}} = 3237 [67.5+1.5568(60-95)] = 3237(13.012) = 42119.84$

65 $f_{65} \cdot Y_{11_{65}} = 2519 [67.5+1.5568(65-95)] = 2919(20.796) = 52385.12$

70 $f_{70} \cdot Y_{11_{70}} = 2856 [67.5+1.5568(70-95)] = 2856(28.58) = 81624.48$

$$75 \ f_{75} \cdot Y11_{75} = 1968 \ [67.5+1.5568(75-95)] = 1968(36.364) = 71564.35$$

$$80 \ f_{80} \cdot Y11_{80} = 2255 \ [67.5+1.5568(80-95)] = 2255(44.148) = 99553.74$$

$$85 \ f_{85} \cdot Y11_{85} = 1706 \ [67.5+1.5568(85-95)] = 1706(51.932) = 88595.99$$

$$90 \ f_{90} \cdot Y11_{90} = 1628 \ [67.5+1.5568(90-95)] = 1628(59.716) = 97217.65$$

$$95 \ f_{95} \cdot Y11_{95} = 1516 \ [67.5+1.5568(95-95)] = 1516(67.5) = 102,330$$

$$Y11 = \frac{\Sigma Y11_\Delta}{\Sigma f} \cdot wt_{11}$$

$$= \frac{635,391.17}{30,619} \cdot 2.5$$

$$= 20.752 \cdot 2.5 = 51.88$$

Test and Evaluation

Once the payoff system methodology was developed, the DI selected as the assignment algorithm, and a technique established for forecasting column means, attention was then turned to the development of a working model for demonstration and sensitivity testing. On 8 December 1975, the PJM working model was demonstrated to personnel from the Air Force Military Personnel Center and the Air Force Recruiting Service. Appendix C is a copy of the output presented on the Univac 1108 scope during the demonstration.

The first page of Appendix C contains the input data which were displayed on the U1108 scope and the list of 16 jobs that was displayed. Note that the job in the 16th position is numbered 17, as is explained in Section V; this indicates that the job was actually the 17th in the overall ordering of jobs, but since it was specifically requested by the applicant (see 27130 listed under *Job Preference* which is the first item in the input data), it was displayed in position 16.

The data on the first page of Appendix C set up the basic input data which were then varied to demonstrate the effects of various input changes on the ordered list. There were 13 displayed cases, and the input changes included the M, A, G, E scores, color vision (CU, normal = Y, not normal = N), Job Preference (Job Pref), Physical Examination Status (PULHESX-physical stamina, upper extremities, lower extremities, hearing, eyes, neuropsychiatric, suffix), and Race (Caucasian = C, Other = X) The input data changes associated with the 13 display cases were:

Case	Color Vision (CU)	Job Pref	PULHESX	Race	M	A	G	E	
1 30 60 45 60	Y	271 50	111111	C					
2 30 60 45 80	Y	blank	111111	C					
3 30 60 45 95	Y	blank	111111	C					
4 30 60 45 95	N	blank	111111	C					
5 30 60 45 95	Y	blank	222222	C					
6 35 75 75 35	Y	blank	111111	C					
7 35 75 75 35	Y	blank	111111	X					
8 35 95 95 35	Y	blank	111111	C					
9 35 95 95 35	Y	blank	111111		1	1	9	1	(before it was 3333)
10 35 95 95 35	Y	blank	111111		1	9	1	1	
11 35 45 45 35					3	3	3	3	
12 45 45 45 45									
13 45 45 45 45		Sex = F (the rest were M)							

V. BASELINE PERFORMANCE DATA

Once the PJM system was designed, tested, and implemented, there was a need to establish how well it was meeting its objectives. Toward that end, a survey was developed jointly by the Air Force Human Resources Laboratory and the Recruiting Service and was mailed to recruiting personnel in August 1977 to determine whether field personnel using the system perceived that the system was performing as designed. Appendix D is a copy of the survey, and Appendix E contains the results for the Recruiting Service organizational levels. As can be noted, the system generally was perceived as meeting its objectives very well.

In addition, operational system data were collected and analyzed to see what percentage of people choose jobs on the output list, which consists of up to 15 jobs. In addition, in the 16th position, a specific specialty can be listed if it is one that is requested by the applicant, if the applicant is eligible and if the job is not one of the 15. Appendix F contains summary data for the 16 positions on the job opportunity list and the percentage of applicants getting the jobs they preferred.

From December 1976 to April 1977, the percentage of applicants assigned to the first three specialties on the opportunity list varied from a low of 36.8 to a high of 59.9. Therefore, approximately 50% of the applicants were assigned to the first three positions which are the more optimal jobs for assignment, based on applicant's aptitude and on job availability. In addition, management was concerned that a large percentage of applicants would be assigned to specific AFSs which the applicant could request and which would be listed in the 16th job position. The analysis data clearly indicated that this concern was unfounded. From December 1976 to April 1977, the percentage assigned to jobs listed in the 16th position varied from a high of 13.9 to a low of 2.3, with the percentage getting smaller each month.

For those recruits who stated a preference for a specific AFS (N = 23,623), 37.9 (N = 8,949) were assigned to their stated preference.

VI. FUTURE DIRECTIONS

The Pre-Enlistment PJM system is expected to provide the Air Force with a computer-based assignment capability superior to any previous system. It is far superior in terms of response time and provides a more optimal assignment process than has been previously available. Future efforts in support of the PJM system will focus on developing an improved forecasting system for column (job) means, incorporation of new components in the payoff system, and further research to establish the effectiveness of the system.

In addition, research to develop a Post-Enlistment PJM system has been initiated. This system is to be compatible with the Pre-Enlistment system and is to provide an assignment system for those recruits in basic training who were assigned by the Pre-Enlistment PJM system to an aptitude area (M, A, G, E) instead of to a specific Air Force specialty. Once in basic training, individuals will receive their specific jobs via the Post-Enlistment PJM system.

Once both PJM systems have been developed and refined they will provide the Air Force with a vehicle for implementing new technology as it becomes available. Should research establish relationships for better predicting productivity, job satisfaction, or other appropriate criteria then these variables readily can be incorporated into the PJM systems for immediate payoff to the Air Force.

The PJM system in use today matches people to jobs better than in the past and promises that tomorrow the match will be even more relevant in the constantly changing world of work in the Air Force.

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Two major categories of policy capturing research were presented in the body of this technical report. Some research results associated with these two categories are discussed in this appendix.

Hoffman (1960) conducted a policy capturing study that is an example of the case where predictor variables are explicitly defined. He was interested in capturing the policy associated with clinical diagnosis. Hoffman referred to the policy capturing description process as a "paramorphic representation." This term for him indicated that the policy-capturing process was not exact and many characteristics and properties of the process were not captured. However, the "respresentation" was still usefull because it helped explain that which was observed, namely, the decision making process in clinical diagnosis.

Hoffman presented the results of investigations using both the strictly linear model and a model with configural components (i.e., curvilinear terms). He found that when using the linear model the R values obtained for two judges were .948 and .829, and when cross-validated, the R values for the same two judges were .937 and .837, respectively. For a separate investigation, the configural model produced an R of .88 (corrected for shrinkage) and an R using the linear model of .91 (corrected for shrinkage). Hoffman found that the judges believed they were using a complex strategy, however, a simple strictly linear model captured their policy very well.

Another study where predictors were explicitly defined was reported by Keeley and Doherty (1972). It involved having four PhDs in Biology make admissions judgments on 528 hypothetical applicants to their graduate program. Six predictors were utilized (a) grade point average, (b) quality of undergraduate school, (c) verbal graduate record exam score, (d) quantitative graduate record exam score, (e) physical science background, and (f) physical science grades. These predictors were presented to the judges in profile form, and the profiles had either 1, 2, 4, or all 6 of the predictors. The profiles were presented in the same random order for all judges.

Based on their analysis, Keeley and Doherty concluded that (a) all four judges weighted grade point average heavily, (b) all four judges had similar strategies, (c) a linear model is a good descriptive model of the judges' behavior, (d) little shrinkage occurs on cross-validation, (e) most variance is accounted for by three variables (approximately 80%), and (f) judgment strategies do not change with variation in number of predictors from 2 to 6. This last conclusion is in conflict with Einhorn (1971) who indicated that judges' strategies change with variation in number of predictors presented. Keeley and Doherty noted this and indicated that more research is needed in this area.

A study conforming to the case where predictors are not explicitly provided was conducted by Jackson, Saathoff, Hunter (1966). Their study focused on what makes audiences favor one musical selection over another. They had audiences attending San Antonio (Texas) Symphony Concerts rate the selections on a five-point scale of favorability. In turn, they had music experts hypothesize what variables were considered by the audience. The experts listed 33 predictor variables which yielded an R^2 = .2088 and, with a selected set of 11 variables, an R^2 = .1914 after performing regression analysis. This study is but one example of how powerful policy capturing can be and how easily it can be applied in a setting where other techniques are difficult, if not impossible, to apply.

In addition to the above settings, policy capturing has been applied in the business world with very positive results. Bowman (1963) developed a policy capturing approach which he called the "management coefficients theory." The approach involves using a policy capturing procedure similar to those discussed previously, as opposed to the typical quantitative cost procedures typically used in industrial management settings. Bowman reported three studies and concluded that policy capturing of experts produced better results than the traditional cost accounting procedures.

Kunrether (1969) utilized Bowman's approach and applied it to decision making policies of managers in a medium-sized electronics firm. He concluded that Bowman' approach had certain advantages over the traditional operations-research approach. One of the main advantages was that cost data (which are difficult to obtain at times) were not required. A second advantage was that performance was more consistent and superior under the policy capturing model when a new but similar activity or program was being initiated within the company.

In summary, the research evidence indicates that (a) the strictly linear model (i.e., the model contains no power or interaction predictor terms) is a very powerful device for predicting the policy of a judge made on the basis of a set of predictors, (b) little shrinkage of R^2 values occurs upon cross-validation, (c) the strictly linear model is capable of highlighting individual differences in strategies, (d) policy capturing has proved to be an effective technique in a variety of settings, and (e) the number of predictors required to capture a judge's policy is not clear, however, the number required appears to be small, with perhaps three or four accounting for 80% or more of the variance in most situations.

Group Policy Capturing

The research evidence, in the main, has been concerned with capturing the strategy or policy of an individual judge, or a series of individuals. There are decision-making situations, however, which require that a group of individuals arrive at a common solution concerning a problem. A graduate school admissions selection committee would be an example of such a group. The problem in capturing the policy or strategy of such a group involves the isolation of a regression equation which best represents the decision making process of the group as a whole. Toward this end a number of techniques for grouping or clustering judges in terms of the homogeneity of their equations have been developed.

Especially noteworthy is the policy-capturing technique called Judgement Analysis (JAN), which is a special application of a technique originally suggested by Ward (1961) and later developed by Bottenberg and Christal (1961). The title "Judgement Analysis (JAN)" originated with Christal (1963) in his technical report which adapted the Bottenberg and Christal hierarchical grouping technique to analyzing group judgment or group policy capturing.

JAN involves having a group or board rank (or rate) individuals (or other stimuli) based on a number of predictor variables, such as test scores. After this has been accomplished, each judge's policy is captured by way of a regression equation as previously described. This equation may not only have simple linear components, but also nonlinear interaction and power terms.

The individual regression equations of all judges are then submitted to the hierarchical grouping technique JAN, which defines the areas of agreement or disagreement among the board or group members. The first step in the grouping procedure involves computing a single R^2 which represents the overall predictive efficiency obtained when a separate least-squares weighted regression equation is used for each judge. In the second step, each judge's regression is compared with every other equation, in order to determine which two judges, from the total judge group, have the most homogenous regression equations. That is, the two judges who are in closest agreement concerning how the predictors should be weighted are identified. The third step, in turn, involves determining the single equation which best represents the joint policy of these two raters. In addition, it indicates the overall loss in predictive efficiency that results when the original N equations are replaced by the best set of N-1 regression equations. More specifically, overall loss in predictive efficiency is accomplished by comparing the magnitude of the overall R^2 in the original N equations with the derived R^2 obtained with the N-1 set of equations.

In an iterative fashion, the technique involves systematically reducing the number of prediction equations (or judge clusters) by one at each step, so as to minimize the loss in overall

predictive efficiency. In each case, an overall R^2 is obtained, as well as the single regression equation for each cluster which best represents the joint policy of all raters in that cluster. Finally as a last step, a single prediction equation is derived so as to express the joint policy of all raters with as little error as possible.

In summary, JAN permits (a) inconsistent judges to be identified and eliminated (if desired) from a board by examining each judge's R^2, (b) identification of inter-rater agreement (first-step), (c) clustering of judges in terms of homogeneity of their regression (prediction) equations, and therefore, identification and description of different policies and (d) detecting the decrease in predictive efficiency at each step in the iterative process by examination of R^2 values.

Part 1 – Payoff

A payoff value is generated for every Air Force Specialty (AFS) for which a potential recruit is eligible. At the present time, six different terms make up the payoff value formula.

			Range
Y0	=	Constant Fill Component	700
Y11	=	Aptitude-Difficulty Component	0-100
Y12	=	Technical School Success Component	0- 50
Y13	=	Area Preference Component	0- 1
Y2	=	Variable Fill Component	0-100
Y3	=	Minority (Non-Minority) Component	0-100

A weight is associated with Y11, Y12, Y13, Y2, and Y3.

Wt11 = Aptitude-Difficulty Component Weight
Wt12 = Technical School Success Component Weight
Wt13 = Area Preference Component Weight
Wt2 = Variable Fill Component Weight
Wt3 = Minority (Non-Minority) Component

$$\text{Payoff} = Y0 + (Wt11 * Y11) + (Wt12 * Y12) + (Wt13 * Y13) + (Wt2 * Y2) + (Wt3 * Y3)$$

$$0 \le \text{Payoff} \le 1000$$

A. Constant Fill Component

P0 – Maximum (and minimum) value of Y0
F11 – Maximum value which (Wt11 * Y11) can attain
P12 – Maximum value which (Wt12 * Y12) can attain
P13 – Maximum value which (Wt13 * Y13) can attain
P2 – Maximum value which (Wt2 * Y2) can attain
P3 – Maximum value which (Wt3 * Y3) can attain.

$$Y0 = 1000 - F11 - P12 - P13 - P2 - P3$$
$$(\text{Note } P0 = Y0)$$

B. Aptitude-Difficulty Component

To compute the Aptitude Difficulty component (Y11) of the payoff, the job difficulty index of the job must be used. The job difficulty for most of the Electronics area AFSs was obtained from past research documented in AFHRL-TR-73-39, *The electronic career ladder evaluation project. An Aptitude requirements study* by James D. Carpenter. The job difficulty index for jobs in the technical report is shown below. The job difficulty index for Air Force Specialty Codes (AFSCs) not found on this list will be equal to the minimum AQE score requirement of that AFS. Future research, such as the research conducted in the Electronics career area, will make the job difficulty index available for other AFSs.

AFSC Difficulty

	AFSC	Difficulty		AFSC	Difficulty
1.	32430	94.69	29.	32230	79.31
2.	54830	90.17	30.	32531	79.14
3.	30830	89.49	31.	32330	79.08
4.	32834	88.47	32.	34330	78.08
5.	32631	88.38	33.	30435	77.87
6.	30534	88.30	34.	30431	77.81
7.	30333	86.69	35.	46330	77.48
8.	32930	86.25	36.	34230	76.48
9.	32830	86.09	37.	34530	75.15
10.	32632	85.75	38.	36233	75.05
11.	30436	85.52	39.	30230	74.51
12.	30630	85.39	40.	34231	74.17
13.	32832	84.44	41.	32730	74.17
14.	32831	84.43	42.	40430	73.77
15.	32130	84.33	43.	40431	73.62
16.	30332	84.28	44.	30730	73.11
17.	30331	83.42	45.	31730	72.49
18.	30231	83.16	46.	36232	71.78
19.	30430	81.96	47.	34131	70.46
20.	31632	81.69	48.	36330	70.42
21.	31631	81.40	49.	34430	68.27
22.	31630	80.69	50.	54130	66.26
23.	32830	80.66	51.	42230	66.12
24.	32630	80.41	52.	36231	65.98
25.	32530	79.76	53.	44130	64.72
26.	30434	79.74	54.	40131	62.29
27.	40330	79.67	55.	54230	57.96
28.	32251	79.60	56.	54231	57.43

Let

DEXP	=	3
AEXP	=	1
DMI	=	2
Y(1,1)	=	15
Y(2,1)	=	35
Y(1,2)	=	-250
Y(2,2)	=	100
A(1)	=	40
A(2)	=	95
D(1)	=	40
D(2)	=	100
I	=	2
J	=	1
KH	=	1
JCH	=	2

$$B0 = Y(I,J)$$

$$B1 = (Y(ICH,J) - Y(I,J))((A(ICH) - A(I)) ** AEXP)$$

$$B2 = (DEXP * (Y(I,JCH) - Y(I,J)))((D(JCH) - D(J)) ** DMI)$$

$$B3 = (Y(ICH,JCH) - Y(ICH,J) + (DMI * (Y(I,JCH) - Y(I,J)))((D(JCH) - D(J)) ** DEXP) * ((A(ICH) - A(I)) ** AEXP))$$

$$AN = (A(ICH) - A(I)) ** AEXP$$

For a particular AFSC with job difficulty = DIF

$$DN = DIF - D(J)$$

$$C0 = B0 + [B2 * (DN ** DMI)] * (1 - ((DMI * DN)(DEXP * (D(JCH) - D(J)))))$$

$$C1 = B1 - ((B2 * (DN ** DMI)) AN) + (B3 * (DN ** DEXP))$$

$$AI = \text{area AQE score for potential recruit}$$

$$YI1 = C0 + C1 (AI - 95)$$

$$WtI1 = \frac{PI1}{100}$$

C   *Technical School Success Component:*

For each AFS having a sufficient sample size N (N ≥ 50), a regression equation computed for that particular AFS is used to compute the Technical School Success Component (YI2). For the open enlistment AFSC (99000) and for AFSs that did not have a sufficient N, a regression equation based on a random sample of 1,000 airmen in the same area (Mechanical, Administrative, General, or Electronics (M, A, G, or E) as the open enlistment requirement or as the AFS is used. Thirteen variables are used in computing the equation with N greater than or equal to and less than or equal to (50 ≤ N ≤ 1000)

Variable 1 (V1)	= AFQT-AFWST Results	RW1	Raw Weight of V1
Variable 2 (V2)	= MECH AQE Test Score	RW2	Raw Weight of V2
Variable 3 (V3)	= ADMIN AQE Test Score	RW3	Raw Weight of V3
Variable 4 (V4)	= GEN AQE Test Score	RW4	Raw Weight of V4
Variable 5 (V5)	= ELEC AQE Test Score	RW5	Raw Weight of V5
Variable 6 (V6)	= 1 if High School Grade 0 otherwise	RW6	Raw Weight of V6
Variable 7 (V7)	= 1 if have taken Algebra 0 otherwise	RW7	Raw Weight of V7
Variable 8 (V8)	= 1 if have taken Geometry 0 otherwise	RW8	Raw Weight of V8
Variable 9 (V9)	= 1 if have taken Trigonometry 0 otherwise	RW9	Raw Weight of V9
Variable 10 (V10)	= 1 if have taken Physics 0 otherwise	RW10	Raw Weight of V10
Variable 11 (V11)	= 1 if have taken Chemistry 0 otherwise	RW11	Raw Weight of V11
Variable 12 (V12)	= 1 if have taken Biology 0 otherwise	RW12	Raw Weight of V12
Variable 13 (V13)	= 1 if have taken English 0 otherwise	RW13	Raw Weight of V13

$$YI2 = \text{Regression Constant} - C0 + (RW1 * V1) + (RW2 * V2) + (RW3 * V3) + (RW4 * V4) + (RW5 * V5) + (RW6 * V6) + (RW7 * V7) + (RW8 * V8) + (RW9 * V9) + (RW10 * V10) + (RW11 * V11) + (RW12 * V12) + (RW13 * V13)$$

$$WtI2 = \frac{PI2}{59}$$

D   Area Preference Component

Each potential applicant will be able to express an area preference (M, A, G, or L) by numerically expressing preferences for each area. For each area a recruit may express a preference weight (Pref. M, Pref. A, Pref. G, Pref. L). The preference weight will range from 0 to any positive value.

For a particular job,

$$Y13 = \frac{\text{Preference weight of job's area}}{\text{Pref. M + Pref. A + Pref. G + Pref. L}}$$

If Pref. M + Pref. A + Pref. G + Pref. L = 0, then

$$Y13 = .25 \text{ for all jobs}$$
$$Wt13 = P13$$

E   Variable Fill Component

For each AFS for which a payoff is computed, a Variable Fill component (Y2) is computed according to the following formula

$$Y2 = (kP) + \frac{P(1-k)}{210} T = kP + \frac{P(1-k)T}{210}$$

Where   k   = 5 at start but will eventually have a range

$$0 \le k \le 1 .$$

$$P = 100$$

$$T = \text{Number of days used out of 210}$$

$$= 210 - (DOI - \text{Current date})$$

$$F = \frac{(\text{Total Quota of Month} - \text{Quota left for Month})}{\text{Total Quota of Month}} \quad (\text{Total Quota of Month} - \text{Number of Jobs Released for Month})$$

$$Wt2 = \frac{P2}{100}$$

F   Minority (Non-Minority) Component

Let F $= \frac{M}{T}$ fraction of fill observed

T = total number of jobs released for the month in which the first opening occurs on or after the potential recruit's available date for enlistment

M = number of minority assigned for month of first opening if the potential recruit is a minority or number of non-minority assigned for month of first opening if the potential recruit is a non-minority.

G = minority goal (percent) desired if potential recruit is a minority or non-minority goal (1 - minority goal) desired if potential recruit is a non-minority recruit.

P = 100

1. Whenever $G = 0$, $Y3 = P/2$ for all F

2. Whenever $G = 1$, $Y3 = P/2$ for all F

3. Whenever $0 < G \leqslant .5$ and $0 \leqslant F \leqslant \frac{1}{2}G$,

$$Y3 = P/2 + \frac{P}{2G^3} [G - F]^3$$

4. Whenever $0 < G \leqslant .5$ and $2G < F \leqslant 1$, $Y3 = 0$.

5. Whenever $.5 < G \leqslant 1$ and $2G - 1 < F \leqslant 1$,

$$Y3 = P/2 + \frac{P}{2(1-G)^3} [G - F]^3.$$

6. Whenever $.5 < G \leqslant 1$ and $0 \leqslant F < 2G - 1$, $Y3 = P$.

Note $G = 0$ or $G = 1$ should be interpreted as having no goal [Whenever $G = 0$ or $G = 1$, then $Y3 = P/2$. No minority goal is specified. If a goal of $G = 0$ or $G = 1$ is actually desired then

    a)   Whenever $G = 0$ and $F \neq 0$, $Y3 = 0$.

    b)   Whenever $G = 0$ and $F = 0$, $Y3 = P/2$.

    c)   Whenever $G = 1$ and $F \neq 1$, $Y3 = P$.

    d)   Whenever $G = 1$ and $F = 1$, $Y3 = P/2$.

$$Wt3 = \frac{P3}{100}$$

Part II - Decision Index

The Decision Index (DI) documented in WADC-TN-59-38, *Use of a Decision Index in Assigning Air Force Personnel* by Joe H. Ward, Jr., is used to order the list of AFSs for which the potential recruit is eligible. The DI for the j-th AFS will be designated D_j. To compute D_j, each AFS must have a predicted column mean. This predicted column mean is for the future pool of recruits for the AFS.

The AFS order of presentation is determined by sorting the AFSs using D_j as the sort key and sorting in descending order

$C_{.j}/N_{.o}$ = predicted column mean for j-th AFS for which the recruit is eligible.

D_j = Payoff(j) $- C_{.j}/N_o$

Part III - Optimality Indicator

The optimality indicator is used to show a value of a particular AFS compared to other specialties on the list of AFSCs for which the recruit is eligible. It does not affect the order of the list already achieved by sorting the D_j.

To compute the optimality indicator for the k jobs for which the potential recruit is eligible, compute the following.

Let k = the number of AFSs for which a potential recruit is eligible

    j = 1, k where j is the j-th AFSC for which the recruit is eligible.

    D_j = Payoff(j) $- C_{.j}/N_o$

$C_{.j}/N_o$ = predicted column mean.

Q_j = the number of openings for the j-th AFSC for which a recruit is eligible.

$$N = \sum_{j=1}^{k} Q_j$$

$$\bar{D} = \frac{\sum\limits_{j=1}^{k} Q_j D_j}{N} \quad \text{(mean DI)}$$

$$\sigma^2 = \frac{\sum\limits_{j=1}^{k} Q_j D_j^2}{N} - \bar{D}^2$$

$$\text{OPTINDX}(j) = 50 + 20 \, \frac{(D_j - \bar{D})}{\sigma}$$

MAX(OPTINDX) = maximum value of OPTINDX(j) for all j.

OPTIND(j) = OPTINDX(j) + (100 - MAX(OPTINDX)).

Negative values of OPTIND(j) should be set = 0.

Part IV – Initial values and Example Computations

A. *Initial Values*

The payoff of a recruit for an AFSC will always have a maximum total of 1000. The initial maximum value recommended by AFHRL for Y0, Y11, Y12, Y13, Y2, and Y3 are the following

P0	= 700
P11	= 50
P12	= 15
P13	= 30
P2	= 185
P3	= 20

B. *Computational Example of Aptitude-Difficulty Component*

DEXP	=	3
AEXP	=	1
DII	=	2
Y(1.1)	=	15
Y(2.1)	=	35
Y(1.2)	=	-250
Y(2.2)	=	100
A(1)	=	40
A(2)	=	95
D(1)	=	40
D(2)	=	100
I	=	2
J	=	1
ICH	=	1
JCH	=	2

B0 = Y(1,J)
= Y(2,1)
= 35

B1 = (Y(ICH,J) − Y(1,J))/((A(ICH) − A(1)) ** AEXP)
= (Y(1,1) − Y(2,1))/((A(1) − A(2)) ** 1)
= (15 − 35)/((40 − 95) ** 1)
= −20/−55
= .3636

B2 = (DEXP * (Y(1,JCH) − Y(1,J)))/((D(JCH) − D(J)) ** DM1)
= (DEXP * (Y(2,2) − Y(2,1)))/((D(2) − D(1)) ** DM1)
= (3 * (100 − 35))/((100 − 40) ** 2)
= (3 * 65)/(60 ** 2)
= .54167

B3 = (Y(ICH,JCH) − Y(ICH,J) + (DM1 * (Y(1,JCH) − Y(1,J)))/(((D(JCH) − D(J)) ** DEXP)
* ((A(ICH) − A(1)) ** AEXP))
= (Y(1,2) − Y(1,1) + (DM1 * (Y(2,2) − Y(2,1)))/(((D(2) − D(1)) ** DEXP) * ((A(1)
− A(2)) ** AEXP))
= (−250 − 15 + (2 * (100 − 35)))/(((100 − 40) ** 3) * ((40 − 95) ** 1))
= −135/11,880,000
= .0000113636

AX = (A(ICH) − A(1)) ** AEXP
= (A(1) − A(2)) ** AEXP
= (40 − 95) ** 1
= −55

For a particular AFS whose difficulty is 70.

DIF = 70 (AFSC difficulty)
DX = DIF − D(J)
= DIF − D(1)
= 70 − 40
= 30

C0 = B0 + [(B2 * (DX ** DM1)) * (1 − ((DM1 * DX)/(DEXP * (D(JCH) − D(J)))))]
= 35 + [(.054157 * (30 ** 2)) * (1 − ((2 * 30)/(3 * (100 − 40))))]
= 67.5

C1 = B1 − ((B2 * (DX ** DM1))/AX) + (B3 * (DX ** DEXP))
= .3636 − ((.054167 * (30 ** 2))/ −55) + (.0000113636 * (30 ** 3))
= 1.5568

Y11 can be computed for an AFS using C0, C1, and the potential recruits AQE score (AI) in the AFS's area

Given that the AFSC is an A-area AFS with a difficulty index of 70 (as defined above) and that the recruit's A-area AQE is 70, then

Y11 = C0 + C1 (AI − 95) where AI is the potential recruit's A-area AQE score

Y11 = 67.5 + 1.5568 (70 − 95)
= 28.58

W11 * Y11 = 50/100 * 28.58
= 14.29

C. *Computational Example of Technical School Success Component*

Y12 = Regression Constant −60 + (RW1 * V1) + (RW2 * V2) + (RW3 * V3) + (RW4 * V4) + (RW5 * V5) + (RW6 * V6) + (RW7 * V7) + (RW8 * V8) + (RW9 * V9) + (RW10 * V10) + (RW11 * V11) + (RW12 * V12) + (RW13 * V13)

Using AFSC 44330

Y12 = 71.16287 − 60 + (.05468 * V1) + (.06524 * V2) + (.04542 * V3) + (−.01183 * V4) + (.03724 * V5) + (1.04819 * V6) + (.58168 * V7) + (.46273 * V8) + (.03254 * V9) + (−.31368 * V10) + (.44681 * V11) + (1.07031 * V12) + (.38882 * V13)

Given that the potential recruit has an AFQT score of 90, a MECH AQE of 40, and ADMIN AQE of 50, a GEN AQE of 60, and ELEC AQE of 70, is a high school graduate and has taken all the high school courses, except English, then Y12 would be

Y12 = 71.16287 − 60 + (.05468 * 90) + (.06524 * 40) + (.04542 * 50) − (.01183 * 60) + (.03724 * 70) + (1.04819 * 1) + (.58168 * 1) + (.46271 * 1) + (.03254 * 1) − (.31368 * 1) + (.44681 * 1) + (1.07031 * 1) + (.38882 * 0)

Y12 = 26.19023

Wt12 * Y12 = 15/50 * 26.19023
= 7.85707

D. *Computational Example of Area Preference Component*

A potential recruit whose preferences are 0 for M area, 2 for A area, 4 for G area and 6 for E area will Y13 for an AFS in the G area computed as shown below

Pref M = 0
Pref A = 2
Pref G = 4
Pref E = 6

$$Y13 = \frac{\text{Preference weight of job's area} = \text{Pref G}}{\text{Pref M} + \text{Pref A} + \text{Pref G} + \text{Pref E}} \quad \left(\text{for AFS's in G area}\right)$$

$$= \frac{4}{0 + 2 + 4 + 6}$$

$$= .3333$$

Wt13 * Y13 = 30 * .3333
= 10.0

E. *Computational Example of Variable Fill Component*

Given

DOE = 17 February 1978   for this AFS
Current date = 1 September 1977
k = .5
Total Quota (released) = 10,000
Quota left unfilled for month = 3861

DOE is the date of the first opening of the AFS which is on or after the available date (say 1 September 1977).

$P = 100$

$T = 210$ (17 Feburary 1978   1 September 1977)

$ = 210 \quad 170$

$ = 40$

$$F = \frac{\text{Total Quota of Month} - \text{Quota left (released and unfilled)}}{\text{Total Quota of Month (released)}}$$

$$= \frac{10000 - 3861}{10000}$$

$$= 6139/10000$$

$$= .6139$$

$$Y2 = kP + \frac{P(1-k)}{210} T - kPF - \frac{P(1-2k)TF}{210}$$

$$= (.5 \cdot 100) + \frac{100(1-.5)}{210}(40) \quad (.5 \cdot 100 \cdot .6139) \quad \frac{100(1 - (2 \cdot 5))(40 \cdot .6139)}{210}$$

$$= 50 + \frac{50(40)}{210} - 30.695 \quad 0$$

$$= 28.8288$$

$$W_{12} \cdot Y2 = 53.33328$$

F. *Computational Example of Minority (Non-Minority) Component*

$P = 100$

Let $G = .13$

$ M = 10$

$ T = 200$

$ F = M/T$

$ = 10/200$

$ = .05$

Therefore since $0 < G \leqslant .5$ and $0 \leqslant F \leqslant 2G$

$$0 < .13 \leqslant .5 \text{ and } 0 \leqslant .05 \leqslant .26$$

$$Y3 = P/2 + \frac{P}{2G^3} [G - F]^3$$

$$= 100/2 + \frac{100}{2(.13)^3} [.13 - .05]^3$$

$$= 50 + 50 \left[\frac{.08}{.13} \right]^3$$

$$= 50 + 50(.2330451)$$

$$= 61.65225$$

$$W_{t3} * Y3 = 20/100 * 61.65225$$

$$= P3/100 * 61.65225$$

$$= 12.33045$$

G. *Computational Example of Decision Index and Optimality Indication Using Computation from above B through F of Part IV*

Payoff $= Y0 + (W_{t11} * Y11) + (W_{t12} * Y12) + (W_{t13} * Y13) + (W_{t2} * Y2) + (W_{t3} * Y3)$

$$= 700 + 14.29 + 7.85707 + 10 + 53.33328 + 12.33045$$

$$= 797.8108$$

Assuming $C_{.j}/N_{.j} = 750.1234$ (predicted column mean)

DI $= Payoff - C_{.j}/N_{.j}$

$$= 797.8108 - 750.1234$$

$$= 47.68740$$

The list of all AFSs for which a potential recruit is eligible can be long, to simplify computations in the example, the list used will consist of only four. The list could involve 50 or more AFSs depending on how many the recruit is eligible for and how many have openings.

AFSC	Q_i	D_i
AFS01	10	41.29876
AFS02	20	47.68740
AFS03	30	53.68921
AFS04	40	42.76879

Sort in descending order with sort key = DI field to get the following

Order of Presentation

AFSC	Q_i	D_i
1. AFS03	30	53.68921
2. AFS02	20	47.68740
3. AFS04	40	42.76879
4. AFS01	10	41.29876

$$N = \sum_{j=1}^{4} Q_j$$

$$= 30 + 20 + 40 + 10$$

$$= 100$$

$$\overline{D} = \frac{\sum\limits_{j=1}^{4} Q_j D_j}{N}$$

$$= \frac{(30 * 53.68921) + (20 * 47.6874) + (40 * 42.76879) + (10 * 41.29876)}{100}$$

$$= 46.881635$$

$$\frac{\sum\limits_{j=1}^{4} Q_j D_j^2}{N} = \frac{30 * (53.68921)^2 + 20 * (47.6874)^2 + 40 * (42.76879)^2}{100} + \frac{10 * (41.29876)^2}{100}$$

$$= 2221.8035$$

$$\sigma^2 = \frac{\sum\limits_{j=1}^{4} Q_j D_j^2}{N} - (\overline{D})^2$$

$$= 23.91582$$

$$\sigma = 4.89038$$

$$\text{OPTINDX(1)} = 50 + 20 \left(\frac{D_i - \overline{D}}{\sigma}\right)$$

$$= 50 + 20 \left(\frac{53.68921 - 46.881635}{4.89038}\right)$$

$$= 77.84068$$

MAX(OPTINDX) = OPTIND(1) = 77.84069

OPTIND(1) = OPTIND(1) + (100 - MAX(OPTINDX))

= 77.84069 + (100 - 77.84069)

= 100

OPTIND(2) = OPTINDX(2) + (100 - MAX(OPTINDX))

= 53.2953 + (100 - 77.84069)

= 75.4546

FINAL LIST

AFSC	Q	OPT Indicator
AFS03	30	100
AFS02	20	75
AFS04	40	55
AFS01	10	49

Note. Order will not change, still order found using DI.

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APPENDIX C AIR FORCE HUMAN RESOURCES LABORATORY
DEMONSTRATION 8 DECEMBER 1975

```
/ JOB PREF /NP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM /  DOB  /
27130          3  3  3  3  760501  111111     Y   69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVR / ED /   HS  / TP / DL / RACE / SEX / CIT / HRP /
30   60  95  60    70     N    F   111111    Y    Y     C     M     I     N

/         NAME            / O-N-T / ROA / LAT / EDPT /
DOF JOHN                    123456
```

DO YOU WISH TO VERIFY THIS DATA? --------------------------------->YES

DO YOU WISH TO MAKE ANY CORRECTIONS? -------------------------->NO

ROA   SCORE NEEDED FOR THIS RECRUIT. IF NOT AVAILABLE PRESS TRANSMIT->SS

	JOB	TITLE (43.53	28.643)	EAA	DATE AVL	NR AVL	OPT	IND
1.	64530	INVENTORY MANAGEMENT SP		A60	MAY 76	35		1
2.	70731	MORSE SYSTEMS OPERATOR		A60	MAY 76	2		2
3.	73230	PERSONNEL SP		A60	MAY 76	34		3

	JOB	TITLE (43.53	28.643)	EAA	DATE AVL	NR AVL	OPT	IND
4.	29333	RADIO OPERATOR		A50	MAY 76	5		4
5.	32730	OFF FIRE CON SYS OPERATOR		K60	MAY 76	7		5
6.	99000SA	OPEN ENLISTMENT		A60	MAY 76	20		6

	JOB	TITLE (43.53	28.643)	EAA	DATE AVL	NR AVL	OPT	IND
7.	99000EE	OPEN ENLISTMENT		E60	MAY 76	20		7
8.	60530	AIR PASSENGER SP		A50	MAY 76	11		8
9.	54230	ELECTRICIAN		E50	MAY 76	7		9

	JOB	TITLE (43.53	28.643)	EAA	DATE AVL	NR AVL	OPT	IND
10.	81130	SECURITY SP		G90	MAY 76	338		10
11.	62230	COOK		G90	MAY 76	8		11
12.	63130	FUEL SP		G90	MAY 76	6		12

	JOB	TITLE (43.53	28.643)	EAA	DATE AVL	NR AVL	OPT	IND
13.	57130	FIRE PROTECTION SP		G90	MAY 76	90		13
14.	60230	PASSENGER HOUSEHOLD GOODS SP		A90	MAY 76	10		14
15.	70230	ADMINISTRATION SP		A90	MAY 76	72		15
17.	27130	AIR OPERATIONS SP		A90	MAY 76	5		17
								18

DO YOU WISH TO SEE THE LIST AGAIN?----->D 14

    60230 PLAN,ARRANGE,AND PROCURE COMMERCIAL TRANSPORTATION SERVICES FOR
    THE MOVEMENT OF PERSONNEL,INCLUDING THE SHIPMENT AND STORAGE OF THEIR
    PERSONAL PROPERTY HOUSE TRAILERS,PRIVATELY OWNED VEHICLES OR PETS.
    DETERMINE THE MODE,ROUTING,AND COST OF COMMERCIAL TRANSPORTATION. TECH
    SCHOOL 7WEEKS SHEPPARD AFB, TX.
    PRESS TRANSMIT TO CONTINUE----->

DO YOU WISH TO SEE THE LIST AGAIN?----->NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R

/ JOB PREF /KP/AP/GP/EF/ AVL DT /PULMESX/ CV / HT / WT /FIN/ SI / FH / DOB /
  27130   3 3 3 3 760501 111111   Y   69 155   Y   N   N   550606

/ M / A / G / E / AFGT / WVM / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  30 60 95 60   70   N   F   111111   Y   Y   C   M   I   N

/   NAME   / D-P-I / XDA / LAT / EDPT /
ONE JOHN   123456   55

DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT --------------------------->JOB PREF
PLEASE ENTER THE NEW VALUE FOR JOB   PREF ----------------------->

/ JOB PREF /KP/AP/GP/EF/ AVL DT /PULMESX/ CV / HT / WT /FIN/ SI / FH / DOB /
            3 3 3 3 760501 111111   Y   69 155   Y   N   N   550606

/ M / A / G / E / AFGT / WVM / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  30 60 95 60   70   N   F   111111   Y   Y   C   M   I   N

/   NAME   / D-P-I / XDA / LAT / EDPT /
ONE JOHN   123456   55

DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT --------------------------->E
PLEASE ENTER THE NEW VALUE FOR E   --------------------------->60

/ JOB PREF /KP/AP/GP/EF/ AVL DT /PULMESX/ CV / HT / WT /FIN/ SI / FH / DOB /
            3 3 3 3 760501 111111   Y   69 155   Y   N   N   550606

/ M / A / G / E / AFGT / WVM / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  30 60 95 60   70   N   F   111111   Y   Y   C   M   I   N

/   NAME   / D-P-I / XDA / LAT / EDPT /
ONE JOHN   123456   55

DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------->NO

	JOB	TITLE (97-37 3A-15A)	FAA	DATE AVL	NR AVL	OPT IND
			FRU	MAY 76	5	1
1.	31730	INSTRUMENTATION MECHANIC	FRO	MAY 76	9	2
2.	30931	FLIGHT FACILITES EQUIP REPAIR	FRU	MAY 76	6	3
3.	32231G	WEAP SYS MECH F-HE APG-120				

	JOB	TITLE (97-37 3A-15A)	FAA	DATE AVL	NR AVL	OPT IND
			FRO	MAY 76	1	4
4.	32231M	WEAP SYS MECH F-10SO/P ASG-19	FRO	MAY 76	3	5
5.	32231R	WEAP SYS MECH MA-1 ASG-25	FRO	MAY 76	41	6
6.	30435	GROUND RADIO COM EQUIP REPAIR				

	JOB	TITLE (97-37 3A-15A)	FAA	DATE AVL	NR AVL	OPT IND
			FRU	MAY 76	7	7
7.	32830	AVIONIC COMMUNICATIONS SP	FRO	MAY 76	5	8
8.	31630T	MISSILE SYS ANALYST SP LGM-25	FRO	MAY 76	10	9
9.	31630F	MISSILE SYS ANALYST SP				

	JOB	TITLE (97-37 3A-15A)	FAA	DATE AVL	NR AVL	OPT IND
			FRU	MAY 76	2	10
10.	31630T	MISSILE SYS ANALYST SP,AGM-69A	FRO	MAY 76	5	11
11.	30930	RADIO RELAY EQUIP REPAIRMAN	FRO	MAY 76	9	12
12.	32831	AVIONIC NAV SYS SP				

	JOB	TITLE (97-37 3A-15A)	FAA	DATE AVL	NR AVL	OPT IND
			FRO	MAY 76	5	13
13.	30332	AIR CONTROL WARNING RAD REPAIR	FRO	MAY 76	5	14
14.	32832A	AVIONIC SYS SP HIGH NAV DIGCOM	FRO	MAY 76	6	15
15.	30630	ELEC COMM/CRYPTO SYS REPAIR				41

DO YOU WISH TO SEE THE LIST AGAIN?---->NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R

```
/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM / DOB /
           3   3   3   3  760501  111111    Y    69  155   Y     N     N    550606

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / MRP /
  30   40  95   60    70      N     F   111111    Y    Y     C      M     1     N

/        NAME         / O-R-T / ROA / LAT / EDPT /
  DOE JOHN               123456   SS
```

DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------->E
PLEASE ENTER THE NEW VALUE FOR E   ---------------------------->95

```
/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM / DOB /
           3   3   3   3  760501  111111    Y    69  155   Y     N     N    550606

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / MRP /
  30   60  95   95    70      N     F   111111    Y    Y     C      M     1     N

/        NAME         / O-R-T / ROA / LAT / EDPT /
  DOE JOHN               123456   SS
```

DO YOU WISH TO MAKE ANY CORRECTIONS? ---------------------------->NO

```
        JOB     TITLE  ( 55.96    35.9101)      EAA   DATE AVL   NR AVL   OPT IND
  1.   32430    PRECISION MEASURING EQUIP SP     E80   MAY 76        5        1
  2.   30539    ELEC COMPUTER SYSTEMS REPAIR     E80   MAY 76       10        2
  3.   32839    AVIONIC INERTIAL/RADAR NAV SYS   E80   MAY 76       10        3
M
        JO.     TITLE  ( 55.96    35.9101)      EAA   DATE AVL   NR AVL   OPT IND
  4.   32631A   AVIONICS COMP SP NAV/FLT/WEAP    E80   MAY 76        5        4
  5.   32632A   AVIONIC SYS SP BOMB NAV DISCOM   E80   MAY 76        5        5
  6.   30333    AUTO TRACKING RADAR REPAIRMAN    E80   MAY 76        9        6
M
        JOB     TITLE  ( 55.96    35.9101)      EAA   DATE AVL   NR AVL   OPT IND
  7.   32631B   AVIONICS COMP SP COMM/TRAF CON   E80   MAY 76        5        7
  8.   32833    ELEC WARFARE SYSTEMS SP          E80   MAY 76        7        8
  9.   30630    ELEC COMM/CRYPTO SYS REPAIR      E80   MAY 76        4        9
M
        JOB     TITLE  ( 55.96    35.9101)      EAA   DATE AVL   NR AVL   OPT IND
 10.   32831    AVIONIC NAV SYS SP               E80   MAY 76        9       10
 11.   30332    AIR CONTROL WARNING RAD REPAIR   E80   MAY 76        5       11
 12.   30430    RADIO RELAY EQUIP REPAIRMAN      E80   MAY 76        5       12
 M
        JOB     TITLE  ( 55.96    35.9101)      EAA   DATE AVL   NR AVL   OPT IND
 13.   32130K   BOMB NAV SYS MECH B-52F/F/G/H    E80   MAY 76        5       13
 14.   32830    AVIONIC COMMUNICATIONS SP        E80   MAY 76        7       14
 15.   316306   MISSILE SYS ANALYST SP LGM-25    E80   MAY 76        5       15
                                                                            41
```

DO YOU WISH TO SEE THE LIST AGAIN?---->NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R

```
/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM /  DOB  /
             3  3  3  3   760501  111111   Y   69  155 . Y    N    N   550/06

/ M / A / G / E / AFQT / WVR / ED /   MS   / TP / DL / RACE / SEX / CIT / HRP /
 30  60  95  95    70     X    F    111111   Y    Y    C     M     I     N

/       NAME        / O-R-T / ROA / LAT / EDPT /
 DOE JOHN             123456   55
```

DO YOU WISH TO MAKE ANY CORRECTIONS? ------------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT --------------------------->CV
PLEASE ENTER THE NEW VALUE FOR CV   --------------------------->N

```
/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM /  DOB  /
             3  3  3  3   760501  111111   N   69  155  Y    N    N   550606

/ M / A / G / E / AFQT / WVR / ED /   MS   / TP / DL / RACE / SEX / CIT / HRP /
 30  60  95  95    70     N    F    111111   Y    Y    C     M     I     N

/       NAME        / O-R-T / ROA / LAT / EDPT /
 DOE JOHN             123456   55
```

DO YOU WISH TO MAKE ANY CORRECTIONS? --------------------------->NO

```
        JOB     TITLE  ( 51-75     35.079)       EAA   DATE AVL   NR AVL   OPT IND
 1.  9900DSE OPEN ENLISTMENT                      F80   MAY 76       20        1
 2.  44530   INVENTORY MANAGEMENT SP              A60   MAY 76       35        2
 3.  20733   MORSE SYSTEMS OPERATOR               A60   MAY 76        2        3
M
        JOB     TITLE  ( 51-75     35.079)       EAA   DATE AVL   NR AVL   OPT IND
 4.  73230   PERSONNEL SP                         A60   MAY 76       34        4
 5.  29333   RADIO OPERATOR                       A60   MAY 76        5        5
 6.  9900DEA OPEN ENLISTMENT                      A60   MAY 76       20        6
M
        JOB     TITLE  ( 51-75     35.079)       EAA   DATE AVL   NR AVL   OPT IND
 7.  60530   AIR PASSENGER SP                     A50   MAY 76       11        7
 8.  81130   SECURITY SP                          G90   MAY 76      338        8
 9.  62230   COOK                                 G90   MAY 76        8        9
M
        JOB     TITLE  ( 51-75     35.079)       EAA   DATE AVL   NR AVL   OPT IND
10.  60230   PASSENGER HOUSEHOLD GOODS SP         A90   MAY 76       10       10
11.  70230   ADMINISTRATION SP                    A90   MAY 76       72       11
12.  64730   MATERIAL FACILITES SP                G90   MAY 76        9       12
M
        JOB     TITLE  ( 51-75     35.079)       EAA   DATE AVL   NR AVL   OPT IND
13.  27130   AIR OPERATIONS SP                    A50   MAY 76        5       13
14.  9900DAG OPEN ENLISTMENT                      G90   MAY 76       20       14
                                                                              14
```

DO YOU WISH TO SEE THE LIST AGAIN?----->NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R

```
/ JOB PREF /HP/AP/GP/EM/ AVL DT /PULMESS/ CV / HT / WT /FIN/ SI / FN /  DOB /
              3   3   3   3   760501  111111   N   49  158   Y   N   N   550504

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
   30  60  95  95   70     N    F   111111    Y    Y     C     N     I     N

/        NAME          / O-R-T / ROA / LAT / EDPT /
  DOE JOHN              123456   65


DO YOU WISH TO MAKE ANY CORRECTIONS? ------------------------------>YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------->CV
PLEASE ENTER THE NEW VALUE FOR CV    <----------------------------->Y


/ JOB PREF /HP/AP/GP/EM/ AVL DT /PULMESS/ CV / HT / WT /FIN/ SI / FN /  DOB /
              3   3   3   3   760501  111111   Y   49  155   Y   N   N   550604

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
   30  60  95  96   70     N    F   111111    Y    Y     C     N     I     N

/        NAME          / O-V-T / ROA / LAT / EDPT /
  DOE JOHN              123457   55


DO YOU WISH TO MAKE ANY CORRECTIONS? ------------------------------>YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------->PULMESS
PLEASE ENTER THE NEW VALUE FOR PULMES------------------------------>222222


/ JOB PREF /HP/AP/GP/EM/ AVL DT /PULMESS/ CV / HT / WT /FIN/ SI / FN /  DOB /
              3   3   3   3   760501  222222   Y   49  155   Y   N   N   550604

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
   30  60  95  95   70     N    F   111111    Y    Y     C     N     I     N

/        NAME          / O-T-T / ROA / LAT / EDPT /
  DOE JOHN              123455   55


DO YOU WISH TO MAKE ANY CORRECTIONS? ------------------------------>NO


        JOB    TITLE ( 32-0A   35-5921)      EAA  DATE AVL  NR AVL  OPT IND
   1.  32930   PRECISION MEASURING EQUIP SP   F80  MAY 76      5      1
   2.  30539   ELEC COMPUTER SYSTEMS REPAIR    F80  MAY 76     10      2
   3.  32834   AVIONIC INERTIAL/RADAR NAV SYS  F80  MAY 76     10      3

        JOB    TITLE ( 32-0A   35-5921)      EAA  DATE AVL  NR AVL  OPT IND
   4.  30333   AUTO TRACKING RADAR REPAIRMAN   F80  MAY 76      9      4
   5.  32833   ELEC WARFARE SYSTEMS SP         F80  MAY 76      7      5
   6.  32831   AVIONIC NAV SYS SP             F80  MAY 76      9      6

        JOB    TITLE ( 32-0A   35-5921)      EAA  DATE AVL  NR AVL  OPT IND
   7.  30332   AIR CONTROL WARNING RAD REPAIR  F80  MAY 76      5      7
   8.  30910   RADIO RELAY EQUIP REPAIRMAN     F80  MAY 76      5      8
   9.  32830   AVIONIC COMMUNICATIONS SP       F80  MAY 76      7      9

        JOB    TITLE ( 32-0A   35-5921)      EAA  DATE AVL  NR AVL  OPT IND
  10.  30931   FLIGHT FACILITES EQUIP REPAIR   E80  MAY 76      4     10
  11.  990001E OPEN ENLISTMENT                 E80  MAY 76     20     11
  12.  64530   INVENTORY MANAGEMENT SP         A80  MAY 76     35     12

        JOB    TITLE ( 32-0A   35-5921)      EAA  DATE AVL  NR AVL  OPT IND
  13.  73230   PERSONNEL SP                    A80  MAY 76     30     13
  14.  990005A OPEN ENLISTMENT                 A80  MAY 76     20     14
  15.  54230   ELECTRICIAN                     E80  MAY 76      7     15
                                                                     22


DO YOU WISH TO SEE THE LIST AGAIN?-----NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R
```

```
/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM /  BOB  /
            3  3  3  3   740501  232222   T    69  155   T    N    N  550606

/ M / A / G / E / AFQT / WVR / ED /   MS   / TP / DL / RACE / SEX / CIT / MRP /
  30  60  95  95    70     N    F   111111   T    T    C     M     I     N

/        NAME          / O-R-T / ROA / LAT / EDPT /
  DOE JOHN               123954   55


DO YOU WISH TO MAKE ANY CORRECTIONS? ---------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT -------------------------->PULHESX
PLEASE ENTER THE NEW VALUE FOR PULHES-------------------------->111111


/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM /  BOB  /
            3  3  3  3   740501  111111   T    69  155   T    N    N  550606

/ M / A / G / E / AFQT / WVR / ED /   MS   / TP / DL / RACE / SEX / CIT / MRP /
  30  60  95  95    70     N    F   111111   T    T    C     M     I     N

/        NAME          / O-R-T / ROA / LAT / EDPT /
  DOE JOHN               123954   55


DO YOU WISH TO MAKE ANY CORRECTIONS? ---------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT -------------------------->M
PLEASE ENTER THE NEW VALUE FOR M     -------------------------->35


/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM /  BOB  /
            3  3  3  3   740501  111111   T    69  155   T    N    N  550606

/ M / A / G / E / AFQT / WVR / ED /   MS   / TP / DL / RACE / SEX / CIT / MRP /
  35  60  95  95    70     N    F   111111   T    T    C     M     I     N

/        NAME          / O-R-T / ROA / LAT / EDPT /
  DOE JOHN               123954   55


DO YOU WISH TO MAKE ANY CORRECTIONS? ---------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT -------------------------->A
PLEASE ENTER THE NEW VALUE FOR A     -------------------------->75


/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM /  BOB  /
            3  3  3  3   740501  111111   T    69  155   T    N    N  550606

/ M / A / G / E / AFQT / WVR / ED /   MS   / TP / DL / RACE / SEX / CIT / MRP /
  35  75  95  95    70     N    F   111111   T    T    C     M     I     N

/        NAME          / O-R-T / ROA / LAT / EDPT /
  DOE JOHN               123954   55


DO YOU WISH TO MAKE ANY CORRECTIONS? ---------------------------->YES
```

ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------->G
PLEASE ENTER THE NEW VALUE FOR G   ---------------------------->75

/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM / DOB /
            3   3   3   3   760501 111111   Y   69 155   Y   N   N   550606

/ M / A / G / E / AFQT / MVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35 75 75 95   70   N   F   111111   Y   Y   C   M   I   N

/   NAME   / O-R-T / ROA / LAT / EDPT /
  DOE JOHN   123456   SS

DO YOU WISH TO MAKE ANY CORRECTIONS? --------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------->E
PLEASE ENTER THE NEW VALUE FOR E   ---------------------------->35

/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FM / DOB /
            3   3   3   3   760501 111111   Y   69 155   Y   N   N   550606

/ M / A / G / E / AFQT / MVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35 75 75 35   70   N   F   111111   Y   Y   C   M   I   N

/   NAME   / O-R-T / ROA / LAT / EDPT /
  DOE JOHN   123456   SS

DO YOU WISH TO MAKE ANY CORRECTIONS? -------------------------->NO

EDPT   SCORE NEEDED FOR THIS RECRUIT, IF NOT AVAILABLE PRESS TRANSMIT->SS

	JOB	TITLE (99.05 29.1631	EAA	DATE AVL	NR AVL	OPT IND
1.	990006A	OPEN ENLISTMENT	A70	MAY 76	20	1
2.	64530	INVENTORY MANAGEMENT SP	A60	MAY 76	35	2
3.	23330	CONTINUOUS PHOTOPROCESSING SP	660	MAY 76	9	3
N						
	JOB	TITLE (99.05 29.1631	EAA	DATE AVL	NR AVL	OPT IND
4.	20731	MORSE SYSTEMS OPERATOR	A60	MAY 76	2	4
5.	98130	DENTAL SP	660	MAY 76	18	5
6.	73230	PERSONNEL SP	A60	MAY 76	34	6
N						
	JOB	TITLE (99.05 29.1631	EAA	DATE AVL	NR AVL	OPT IND
7.	22130	PHOTOGRAMMETRIC CARTOGRAPHIC S	660	MAY 76	19	7
8.	90330	RADIOLOGY SP	660	MAY 76	1	8
9.	29333	RADIO OPERATOR	A60	MAY 76	6	9
N						
	JOB	TITLE (99.05 29.1631	EAA	DATE AVL	NR AVL	OPT IND
10.	27930	COMMAND AND CONTROL SP	660	MAY 76	3	40
11.	91130	PHYSIOLOGICAL TRAINING SP	660	MAY 76	23	11
12.	51130A	COMPUTER OPERATOR, BURROUGHS	660	MAY 76	3	12
N						
	JOB	TITLE (99.05 29.1631	EAA	DATE AVL	NR AVL	OPT IND
13.	27230	AIR TRAFFIC CONTROL OPERATOR	660	MAY 76	29	13
14.	60530	AIR PASSENGER SP	A50	MAY 76	11	14
15.	81230	LAW ENFORCEMENT SP	650	MAY 76	79	85
						23

DO YOU WISH TO SEE THE LIST AGAIN?---->NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->N

44

```
/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FN    DOB /
             3   3   3   3   760501  111111   Y    69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35  75  75  35    70     N    F    111111   Y    Y     C     M     I     N

/       NAME        / O-R-T / ROA / LAT / EOPT /
 DOE JOHN             123456   55           55
```

DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT --------------------------->RACE
PLEASE ENTER THE NEW VALUE FOR RACE -------------------------------->X

```
/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FN /  DOB /
             3   3   3   3   760501  111111   Y    69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35  75  75  35    70     N    F    111111   Y    Y     X     M     I     N

/       NAME        / O-R-T / ROA / LAT / EOPT /
 DOE JOHN             123456   55           55
```

DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------->NO

```
        JOB     TITLE ( 91.56    30.579)        EAA  DATE AVL  NR AVL  OPT IND
 1.  99000GA OPEN ENLISTMENT                     A70  MAY 76     20      1
 2.  27230  AIR TRAFFIC CONTROL OPERATOR         G60  MAY 76     29      2
 3.  51130A COMPUTER OPERATOR, BURROUGHS         G60  MAY 76      3      3
M
        JOB     TITLE ( 91.56    30.579)        EAA  DATE AVL  NR AVL  OPT IND
 4.  27430  COMMAND AND CONTROL SP               G60  MAY 76      3      4
 5.  91130  PHYSIOLOGICAL TRAINING SP            G60  MAY 76     23      5
 6.  90330  RADIOLOGY SP                         G60  MAY 76      1      6
M
        JOB     TITLE ( 91.56    30.579)        EAA  DATE AVL  NR AVL  OPT IND
 7.  29333  RADIO OPERATOR                       A60  MAY 76      5      7
 8.  22130  PHOTOGRAMMETRIC CARTOGRAPHIC S       G60  MAY 76     19      8
 9.  73230  PERSONNEL SP                         A60  MAY 76     39      9
M
        JOB     TITLE ( 91.56    30.579)        EAA  DATE AVL  NR AVL  OPT IND
10.  20731  MORSE SYSTEMS OPERATOR               A60  MAY 76      2     10
11.  98130  DENTAL SP                            G60  MAY 76     18     11
12.  23330  CONTINUOUS PHOTOPROCESSING SP        G60  MAY 76      9     12
M
        JOB     TITLE ( 91.56    30.579)        EAA  DATE AVL  NR AVL  OPT IND
13.  64530  INVENTORY MANAGEMENT SP              A60  MAY 76     35     13
14.  81230  LAW ENFORCEMENT SP                   G50  MAY 76     79     14
15.  60530  AIR PASSENGER SP                     A50  MAY 76     11     15
                                                                       23
```

DO YOU WISH TO SEE THE LIST AGAIN?----->NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R

```
/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FN /  DOB /
            3   3   3   3    760501  111111   Y    69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35  75  75  35    70     N    F   111111   Y    Y    X      M    1     M

/       NAME        / O-P-T / ROA / LAT / EDPT /
  DOE JOHN            123956   SS          SS


DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT --------------------------->RACE
PLEASE ENTER THE NEW VALUE FOR RACE   --------------------------->C


/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FN /  DOB /
            3   3   3   3    760501  111111   Y    69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35  75  75  35    70     N    F   111111   Y    Y    C      M    1     M

/       NAME        / O-P-T / ROA / LAT / EDPT /
  DOE JOHN            123956   SS          SS


DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT --------------------------->A
PLEASE ENTER THE NEW VALUE FOR A      --------------------------->95


/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FN /  DOB /
            3   3   3   3    760501  111111   Y    69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35  95  75  35    70     N    F   111111   Y    Y    C      M    1     M

/       NAME        / O-P-T / ROA / LAT / EDPT /
  DOE JOHN            123956   SS          SS


DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT --------------------------->G
PLEASE ENTER THE NEW VALUE FOR G      --------------------------->95


/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT   IN/ SI / FN /  DOB /
            3   3   3   3    760501  111111   Y    69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35  95  95  35    70     N    F   111111   Y    Y    C      M    1     M

/       NAME        / O-P-T / ROA / LAT / EDPT /
  DOE JOHN            123956   SS          SS


DO YOU WISH TO MAKE ANY CORRECTIONS? ----------------------------->YES
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46

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ENTER NAME OF ITEM YOU WISH TO CORRECT -----------------------------------> HP
PLEASE ENTER THE NEW VALUE FOR HP      ----------------------------------->1


/ JOB PREF /HP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FH /  DOB /
            1   3   3   3  760501  111111   Y    69  155   Y    N    N  550404

/ M / A / G / E / AFQT / WVP / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
 35  95  95  35    70    N    F    111111    Y    Y     C     M     1     N

/        NAME          / O-R-T / ROA / LAT / EDPT /
DOE JOHN                 123454   55          55


DO YOU WISH TO MAKE ANY CORRECTIONS? -----------------------------------> YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------------> AP
PLEASE ENTER THE NEW VALUE FOR AP      --------------------------------->1


/ JOB PREF /HP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FH /  DOB /
            1   1   3   3  760501  111111   Y    69  155   Y    N    N  550606

/ M / A / G / E / AFQT / WVH / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
 35  95  95  35    70    N    F    111111    Y    Y     C     M     1     N

/        NAME          / O-R-T / ROA / LAT / EDPT /
DOE JOHN                 123454   55          55


DO YOU WISH TO MAKE ANY CORRECTIONS? -----------------------------------> YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ===============================> GP
PLEASE ENTER THE NEW VALUE FOR GP      --------------------------------->9


/ JOB PREF /HP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FH /  DOB /
            1   1   9   3  760501  111111   Y    69  155   Y    N    N  550606

/ M / A / G / E / AFQT / WVH / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
 35  95  95  35    70    N    F    111111    Y    Y     C     M     1     N

/        NAME          / O-R-T / ROA / LAT / EDPT /
DOE JOHN                 123454   55          55


DO YOU WISH TO MAKE ANY CORRECTIONS? -----------------------------------> YES
ENTER NAME OF ITEM YOU WISH TO CORRECT --------------------------------> EP
PLEASE ENTER THE NEW VALUE FOR EP      --------------------------------->1


/ JOB PREF /HP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FH /  DOB /
            1   1   9   1  760501  311111   Y    69  155   Y    N    N  550606

/ M / A / G / E / AFQT / WVH / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
 35  95  95  35    70    N    F    111111    Y    Y     C     M     1     N

/        NAME          / O-R-T / ROA / LAT / EDPT /
```

DOE JOHN   123456   55   55

DO YOU WISH TO MAKE ANY CORRECTIONS? -------------------------->NO

LAT SCORE NEEDED FOR THIS RECRUIT, IF NOT AVAILABLE PRESS TRANSMIT-->55

	JOB	TITLE (49.04 31.4241)	EAA	DATE AVL	NR AVL	OPT IND
1.	20530	ELEC INTELLIGENCE OPERATIONS S	680	MAY 76	8	1
2.	20350	LANGUAGE/INTERROGATOR SP	680	MAY 76	20	2
3.	25130	WEATHER SP	680	MAY 76	45	3

M

	JOB	TITLE (49.04 31.4241)	FAA	DATE AVL	NR AVL	OPT IND
4.	67232	DISBURSEMENT ACCOUNTING SP	A80	MAY 76	25	4
5.	9900016	OPEN ENLISTMENT	A80	MAY 76	20	5
6.	990C01A	OPEN ENLISTMENT	A80	MAY 76	20	6

M

	JOB	TITLE (49.04 31.4241)	EAA	DATE AVL	NR AVL	OPT IND
7.	23330	CONTINUOUS PHOTOPROCESSING SP	660	MAY 76	4	7
8.	64530	INVENTORY MANAGEMENT SP	A60	MAY 76	35	8
9.	98130	DENTAL SP	660	MAY 76	16	9

M

	JOB	TITLE (49.04 31.4241)	EAA	DATE AVL	NR AVL	OPT IND
10.	22130	PHOTOGRAMMETRIC CARTOGRAPHIC S	660	MAY 76	19	10
11.	27930	COMMAND AND CONTROL SP	660	MAY 76	3	11
12.	90330	RADIOLOGY SP	660	MAY 76	1	12

M

	JOB	TITLE (49.04 31.4241)	EAA	DATE AVL	NR AVL	OPT IND
13.	91130	PHYSIOLOGICAL TRAINING SP	660	MAY 76	23	13
14.	51130A	COMPUTER OPERATOR, BURROUGHS	660	MAY 76	3	14
15.	37230	AIR TRAFFIC CONTROL OPERATOR	660	MAY 76	24	15
						28

DO YOU WISH TO SEE THE LIST AGAIN?----->NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R

/ JOB PREF /HP/OP/GC/ZE/ AVL OT /PULMESR/ CV / HT / WT /FIN/ ST / FM / DOB /
            1   1   Y   1   /?/ SD/ 111131   Y   69 155   Y   N   N 550404

/ M / A / N / E / AIST / HV? / FD /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35 45 55 55   20   E   F   111111   Y   Y   C   N   1   N

/   NAME   / HI-ST / HT? / LAT / LOPT /
DOE JOHN   123455   55   55   55

D YOU WISH TO MAKE ANY CORRECTIONS? ------------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------->AP
PLEASE ENTER THE NEW VALUE FOR AP   ------------------------------>Y

/ JOB PREF /HP/AP/GC/ZE/ AVL T /PULMESR/ CV / HT / WT /FIN/ ST / FM / DOB /
            1   P   Y   1   ?/SD/ 111111   Y   69 155   Y   N   N 550504

/ M / A / N / E / AIST / HV? / FD /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35 45 55 55   25   N   F   111111   Y   Y   C   N   1   N

/   NAME   / HI-ST / HOR / LAT / LOPT /
DOE JOHN   123455   55   55   55

DO YOU WISH TO MAKE ANY CORRECTIONS? ------------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------->GP
PLEASE ENTER THE NEW VALUE FOR GP   ------------------------------>1

/ JOB PREF /HP/AP/GP/ZE/ AVL OT /PULMESR/ CV / HT / WT /FIN/ ST / FM / DOB /
            1   P   1   1   ?/SD/ 111111   Y   69 155   Y   N   N 550604

/ M / A / N / E / AIST / HV? / FD /   HS   / TP / DL / RACE / SEX / CIT / HRP /
  35 45 55 55   25   N   F   111111   Y   Y   C   N   1   N

/   NAME   / HI-ST / HOR / LAT / LOPT /
DOE JOHN   123455   55   55   55

D YOU WISH TO MAKE ANY CORRECTIONS? ------------------------------->NO

       JOB   TITLE (22-3?   31-5-31)   FAA DATE AVL NR AVL OPT IND
1.   67?5?   DISBURSEMENT ACCOUNTING SP   AND MAY 76   28   1
2.   205??   ELEC INTELLIGENCE OPERATIONS S GRD MAY 76   8   2
3.   203??   LANGUAGE/INTERROGATOR SP   GRD MAY 76   20   3

       JOB   TITLE (22-3?   31-5-31)   FAA DATE AVL NR AVL OPT IND
4.   26135   WEATHER SP   GRD MAY 76   45   4
5.   5?0051? OPEN ENLISTMENT   APO MAY 76   20   5
6.   V80501? OPEN ENLISTMENT   GRD MAY 76   20   6

       JOB   TITLE (22-3?   31-5-31)   FAA DATE AVL NR AVL OPT IND
7.   A?5??   INVENTORY MANAGEMENT SP   AAD MAY 76   35   7
8.   2???1   WORK SYSTEMS OPERATOR   AFO MAY 76   2   8
9.   7?21?   PERSONNEL SP   AAD MAY 76   15   9

       JOB   TITLE (22-3?   31-5-31)   FAA DATE AVL NR AVL OPT IND
10. 29313   RADIO OPERATOR   AAD MAY 76   5   10
11. 23330   CONTINUOUS PHOTOPROCESSING SP GAD MAY 76   9   11
12. 9?13?   DENTAL SP   GAD MAY 76   18   12

       JOB   TITLE (22-3?   31-5-31)   FAA DATE AVL NR AVL OPT IND
13. 2213?   PHOTOGRAMMETRIC CARTOGRAPHIC S GAD MAY 76   19   13
14. 90330   RADIOLOGY SP   GAD MAY 76   1   14
15. 2783?   COMMAND AND CONTROL SP   GGD MAY 76   3   15
                                                                  28

DO YOU WISH TO SEE THE LIST AGAIN?------>NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R

```
/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FH /  DOB /
               3   3   3   3   760501  111111   Y   69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVP / ED /    HS    / TP / DL / RACE / SEX / CIT / MRP /
  35  95  95  35    70    N    F   111111    Y    Y     C     M     1     N

/        NAME        / O-B-T / MOA / LAT / EDPT /
DOE JOHN              121955   55    55    55


DO YOU WISH TO MAKE ANY CORRECTIONS? ------------------------------>YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------->M
PLEASE ENTER THE NEW VALUE FOR M       ---------------------------->95


/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FH /  DOB /
               3   3   3   3   760501  111111   Y   69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVP / ED /    HS    / TP / DL / RACE / SEX / CIT / MRP /
  95  95  95  35    70    N    F   111111    Y    Y     C     M     1     N

/        NAME        / O-B-T / MOA / LAT / EDPT /
DOE JOHN              121955   55    55    55


DO YOU WISH TO MAKE ANY CORRECTIONS? ------------------------------>YES
ENTER NAME OF ITEM YOU WISH TO CORRECT ---------------------------->E
PLEASE ENTER THE NEW VALUE FOR E       ---------------------------->95


/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULHESX/ CV / HT / WT /FIN/ SI / FH /  DOB /
               3   3   3   3   760501  111111   Y   69  155   Y    N    N   550606

/ M / A / G / E / AFQT / WVP / ED /    HS    / TP / DL / RACE / SEX / CIT / MRP /
  95  95  95  95    70    N    F   111111    Y    Y     C     M     1     N

/        NAME        / O-B-T / MOA / LAT / EDPT /
DOE JOHN              121955   55    55    55


DO YOU WISH TO MAKE ANY CORRECTIONS?  ---------------------------->NO
```

JOB	TITLE	26-1P 30-1331	EAA	DATE AVL	NR AVL	OPT IND
			G90	MAY 76	338	1
1.	81130	SECURITY SP	G90	MAY 76	8	2
2.	62230	COOK	G90	MAY 76	6	3
3.	63130	FUEL SP				

JOB	TITLE	26-1P 30-1331	EAA	DATE AVL	NR AVL	OPT IND
			M90	MAY 76	4	4
4.	56231	PARACHUTE RIGGER	G90	MAY 76	40	5
5.	57130	FIRE PROTECTION SP	M90	MAY 76	16	6
6.	42410	AIRCRAFT FUEL SYS MECHANIC				

JOB	TITLE	26-1P 30-1331	EAA	DATE AVL	NR AVL	OPT IND
			M90	MAY 76	5	7
7.	58230	FABRIC AND RUBBER PROD SP	A90	MAY 76	10	8
8.	60230	PASSENGER HOUSEHOLD GOODS SP	G90	MAY 76	9	9
9.	64730	MATERIAL FACILITIES SP				

JOB	TITLE	26-1P 30-1331	EAA	DATE AVL	NR AVL	OPT IND
			A90	MAY 76	77	10
10.	70230	ADMINISTRATION SP	M90	MAY 76	2	11
11.	36130	CABLE MAIN/SPLICING SP	A90	MAY 76	5	12
12.	27130	AIR OPERATIONS SP				

JOB	TITLE	26-1P 30-1331	EAA	DATE AVL	NR AVL	OPT IND
			M90	MAY 76	10	13
13.	42132	AIRCRAFT PNEUDRAULIC REPAIR	M90	MAY 76	9	14
14.	42231	AIRCRAFT ENVIRON SYS REPAIRMAN	M90	MAY 76	9	15
15.	55130	PAVEMENTS MAIN SP				29

```
DO YOU WISH TO SEE THE LIST AGAIN?------>NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R
```

```
/ JOB PREF /MP/AM/GP/EP/ AVL DT /FULHEST/ CV / HT / WT /FIN/ SI / SH /  DOB  /
          3   3   3   3   76-501  111111    Y    69  155   Y    N    N   550606

/ M / A / G / E / AKDT / AVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
 45  45  45  45    70     N    F    111111   Y    Y    C     M     1     N

/       NAME       / O-I-T / ROA / LAT / EDPT /
 DOE JOHN            123450   50    50    50


DO YOU WISH TO MAKE ANY CORRECTIONS? ---------------------------->YES
ENTER NAME OF ITEM YOU WISH TO CORRECT -------------------------->SEX
PLEASE ENTER THE NEW VALUE FOR SEX    -------------------------->F


/ JOB PREF /MP/AM/GP/EP/ AVL DT /FULHEST/ CV / HT / WT /FIN/ SI / SH /  DOB  /
          3   3   3   3   76-501  111111    Y    69  155   Y    N    N   550606

/ M / A / G / E / AKDT / AVR / ED /   HS   / TP / DL / RACE / SEX / CIT / HRP /
 45  45  45  45    70     N    F    111111   Y    Y    C     F     1     N

/       NAME       / O-I-T / ROA / LAT / FDPT /
 DOE JOHN            123450   50    50    50


DO YOU WISH TO MAKE ANY CORRECTIONS? ---------------------------->NO


       JOB    TITLE  ( 51-79    26-328)       EAA   DATE AVL   NR AVL   OPT IND
 1.  5A231   PARACHUTE RIGGER                 M90   MAY 76       1        1
 2.  5P230   FABRIC AND RUBBER PROD SP        M90   MAY 76       1        2
 3.  60230   PASSENGER HOUSEHOLD GOODS SP     A90   MAY 76       2        3

       JOB    TITLE  ( 51-79    26-328)       EAA   DATE AVL   NR AVL   OPT IND
 4.  64730   MATERIAL FACILITIES SP          G90   MAY 76       9        4
 5.  70230   ADMINISTRATION SP               A90   MAY 76      19        5
 6.  27133   AIR OPERATIONS SP               A90   MAY 76       1        6

       JOB    TITLE  ( 51-79    26-328)       EAA   DATE AVL   NR AVL   OPT IND
 7.  55130   PAVEMENTS MAINT SP              M90   MAY 76       3        7
 8.  99000AA OPEN ENLISTMENT                 A90   MAY 76       5        8
 9.  99000AG OPEN ENLISTMENT                 G90   MAY 76       5        9

       JOB    TITLE  ( 51-79    26-328)       EAA   DATE AVL   NR AVL   OPT IND
10.  99000AE OPEN ENLISTMENT                 E90   MAY 76       5       10
11.  99000AM OPEN ENLISTMENT                 M90   MAY 76       5       11
                                                                       11

DO YOU WISH TO SEE THE LIST AGAIN?---->NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->R 1

5A231  RESERVED ON 21 MAY 76 FOR DOE JOHN
```

/ JOB PREF /MP/AP/GP/EP/ AVL DT /PULMESX/ CV / HT / WT /FIN/ SI / FH / DOB /
      3 3 3 3   760501 11111 Y 69 155 Y N N 550604

/ M / C / G / E / AFQT / MVP / ED / HS / TP / DL / RACE / SEX / CIT / HRP /
 95 95 95 95 70   N F 111111 Y Y C F I N

/ O-D-T / FDA / LAT / EDPT /
  123456 .5   55   55

NAME
DOE JOHN

DO YOU WISH TO MAKE ANY CORRECTIONS? ---->NO

JOB	TITLE (35.65	26.1761		EAA	DATE AVL	NR AVL	OPT IND
1. 58230	FABRIC AND RUBBER PROP SP			M40	MAY 76		1
2. 60230	PASSENGER HOUSEHOLD GOODS SP			A40	MAY 76	2	2
3. 64730	MATERIAL FACILITIES SP			G40	MAY 76	4	3

JOB	TITLE (35.65	26.1761		EAA	DATE AVL	NR AVL	OPT IND
4. 70230	ADMINISTRATION SP			A40	MAY 76	19	4
5. 27130	AIR OPERATIONS SP			A40	MAY 76	1	5
6. 55130	PAVEMENTS MAIN SP			M40	MAY 76	3	6

JOB	TITLE (35.65	26.1761		EAA	DATE AVL	NR AVL	OPT IND
7. 99000AA	OPEN ENLISTMENT			A40	MAY 76	5	7
8. 99000AG	OPEN ENLISTMENT			G40	MAY 76	5	8
9. 99000AF	OPEN ENLISTMENT			C40	MAY 76	5	9

JOB	TITLE (35.65	26.1761		EAA	DATE AVL	NR AVL	OPT IND
10. 99000AM	OPEN ENLISTMENT			M40	MAY 76	-	10

DO YOU WISH TO SEE THE LIST AGAIN?---->NO

TO RESERVE, TYPE THE NUMBER CORRESPONDING TO THE JOB YOU WANT-->

APPENDIX D. APDS/PROMIS SURVEY

ADVANCED PERSONNEL DATA SYSTEMS PROCUREMENT
MANAGEMENT INFORMATION SYSTEM (APDS/PROMIS) QUESTIONNAIRE

This questionnaire is designed to assess how you perceive APDS/PROMIS is functioning. We are interested if the system is meeting your needs and your constructive comments will be appreciated. A **Comments Section** is provided at the end of the questionnaire for you to indicate both strong and weak aspects of the system.

You should answer all items as honestly as you can so that an accurate evaluation of APDS/PROMIS can be made.

Your individual responses will be treated confidentially and your responses will **not** be provided to your organization or any other agency. Only those personnel performing this research will have access to your completed questionnaire

The last page is a Privacy Act Statement. Please read the statement and if you would like the copy you may remove it

Below are listed items which deal with a variety of aspects of APDS/PROMIS. For items 1-20, indicate how well you agree with the item by choosing the statement below which represents your perception of APDS/PROMIS

1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree
4 = Neither agree nor disagree	

Select the corresponding number and enter it to the right of the appropriate statement. For example, if you **moderately agree** with statement "1", then you would enter the number 6 in the space provided for the statement.

Write your answer in this column

1. APDS/PROMIS is a better job reservation system than the previous telephone system.   1 _____ (5)

2. With APDS/PROMIS, job sales are made easier than with the previous system.   2 _____ (6)

3. Female job reservations require less total time under APDS/PROMIS than with the previous system.   3 _____ (7)

4. Male job sales are made faster under APDS/PROMIS than with the previous system.   4 _____ (8)

5.   APDS/PROMIS with its computer terminals presents a more professional image of the Air Force to potential enlistees.

     5. _____ (9)

6.   The most appropriate jobs for the applicant and the Air Force are reflected in the ordered list output from OPPORTUNITY.

     6. _____ (10)

7.   The most appropriate jobs for your applicants are always available from the APDS/PROMIS job bank

     7. _____ (11)

8.   It would be beneficial to have a greater percentage of female job requirements (as compared to male job requirements) than we do today

     8. _____ (12)

9.   Many more females who are qualified in the Administrative and General (A&G) Aptitude areas are sent to the AFEES than there are jobs available for qualified females in the A and G areas

     9. _____ (13)

10.   The practice of sending many more female applicants (for A and G jobs) to the AFEES than there are A and G jobs available is desirable.

     10 _____ (14)

11.   A recruiter should prescreen applicants to insure their general qualifications characteristics are reasonably consistent with current AF job requirements prior to sending them to the AFEES

     11. _____ (15)

12.   Prior to the implementation of APDS/PROMIS you were presented with information concerning its concept, management, and operation. APDS/PROMIS has fulfilled its advertised goals

     12 _____ (16)

13.   The amount of time scheduled for the system to operate each day is satisfactory

     13. _____ (17)

14.   The amount of unscheduled downtime for APDS PROMIS is not excessive

     14. _____ (18)

15.   The Ave Res value as defined in the MEP is the best way of insuring the optimal match of people to jobs (i.e., reserving the jobs at the top of the list)

     15. _____ (19)

16.   The best way to meet Air Force requirements involves a cooperative effort between recruiter and AFEES liaison personnel Therefore, a recruiting incentive program which is based on applicant flow to AFEES by recruiters is desirable

     16. _____ (20)

17.   A recruiting incentive program for AFEES liaison personnel is desirable

     17. _____ (21)

18.   A combined recruiting incentive program which is based on both applicant flow to the AFEES and the most appropriate person-job-match at the AFEES should be instituted

     18. _____ (22)

19. Excessive emphasis is currently placed on processing females for Administrative and General Aptitude area jobs since these requirements are usually filled.

19. _____ (23)

20. A large number of OPPORTUNITY transactions per applicant seriously impacts the response time of APDS/PROMIS for all users. This inhibits your ability to process available applicants.

20. _____ (24)

Select the appropriate choice below and enter it on the line provided to the right

21. The maximum number of OPPORTUNITY transactions per applicant each day should be

21. _____ (25)

   a   1-3
   b   4-9
   c   10-19
   d   20-29
   e   unlimited

22. You are assigned to which of the following Recruiting Service Organizational levels (check one only)

Group	_____ (26)
Detachment	_____ (27)
Sector	_____ (28)
AFEES	_____ (29)
AFRO	_____ (30)

APDS/PROMIS, in computing the optimal jobs, considers a number of factors associated with applicants and jobs. Select those factors which you understand to be part of the APDS/PROMIS person-job-match and enter a Y (for yes) on the blank provided to the right of the item. Enter N (for no) in the blank if you believe the item is not a part of the system. Enter U (for unsure) if you are not sure.

23. Relationship of applicant to difficulty of job

_____ (31)

24. Cost of training applicant vs probability of not completing training

_____ (32)

25. Preference for individual Air Force specialties

_____ (33)

26. Preference for the broad enlistment aptitude areas (i.e., M, A, G, E areas)

_____ (34)

27. Predicting completion of technical training

_____ (35)

28. Experience in civilian job skills

_____ (36)

29. The sell rate for an Air Force specialty to date

_____ (37)

30. Quotas for minority groups

_____ (38)

31. The degree of equitable distribution of minorities across Air Force jobs

_____ (39)

32. Probability of re-enlisting

_____ (40)

56

Authority		
10 USC 8012, Secretary of Air Force, Powers, Duties, Delegation by Compensation		
E.O. 9397, 22 Nov 43, Numbering System for Federal Accounts Relating to Individual Persons		

Principal Purpose(s)

This information will be used solely for Air Force research and development purposes.

Routine Uses

Information provided by respondents will be treated confidentially and will be used for official research purposes only. Individual identity will not be revealed. Regardless of whether respondents are identified by name and/or SSAN, the research information obtained will be used only to improve instruments and techniques for organizational assessment.

Whether Disclosure is Mandatory or Voluntary and Effect on Individual of Not Providing Information

Disclosure of this information is voluntary. The Air Force continues to improve only with your assistance to make additional refinements in management of its resources. Your cooperation in this effort is appreciated.

Form Number and Date	PRIVACY ACT STATEMENT	Date Privacy Act Statement Assigned (Month and Year)

APPENDIX F RESULTS OF APDS PROMIS SURVEY

APDS/PROMIS QUESTIONNAIRE -- ITEM 1

APDS/PROMIS IS A BETTER JOB RESERVATION
SYSTEM THAN THE PREVIOUS TELEPHONE SYSTEM.

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT		C SECTOR		D APLES		E AFRO		* INVALID		# TOTAL	
1 DISAGREE STRONGLY	0	0.00	8	5.41	2	1.69	21	3.48	0	0.00	32	3.33
2 DISAGREE MODERATE	0	0.00	5	3.38	1	0.85	11	1.82	0	0.00	17	1.77
3 DISAGREE SLIGHTLY	0	0.00	0	0.00	1	0.85	20	3.32	0	0.00	22	2.29
4 AGREE NOR DISAGREE	1	4.55	12	8.11	2	1.69	89	14.76	2	25.00	109	11.33
5 AGREE SLIGHTLY	0	0.00	10	6.76	4	3.39	49	8.13	2	25.00	69	7.17
6 AGREE MODERATELY	3	13.64	35	23.65	27	22.88	105	17.41	1	12.50	183	19.02
7 AGREE STRONGLY	18	81.82	78	52.70	81	68.64	308	51.08	3	37.50	530	55.09
TOTAL / TOTAL COL PERCENT	22	100.00	148	100.00	118	100.00	603	100.00	8	100.00	962	100.00
VALID N	22		148		118		603		8		962	
MEAN ROW VALUE	6.7273		5.8919		6.4746		5.7877		5.6250		5.9470	
STANDARD DEVIATION	0.6863		1.6731		1.0543		1.4120		1.2183		1.5470	
INVALID DATA	0		2		0		12		2		16	

59

APOS/PROMIS QUESTIONNAIRE -- ITEM 2

WITH .US/PROMIS, JOB SALES ARE MADE
EASIER THAN WITH THE PREVIOUS SYSTEM

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE		A	B	C	D	E	F	TOTAL
		GROUP DETACHMENT	SECTOR	AFEES	AFRO	INVALID		
1	DISAGREE STRONGLY	0 0.00	5 7.94	11 7.48	1 0.85	38 6.30	0 0.00	55 5.72
2	DISAGREE MODERATE	0 0.00	0 0.00	12 8.16	1 0.85	23 3.81	0 0.00	36 3.75
3	DISAGREE SLIGHTLY	0 0.00	2 3.17	10 6.80	4 3.39	42 6.97	0 0.00	58 6.04
4	AGREE NOR DISAGREE	1 9.55	6 9.52	21 14.29	8 6.78	131 21.72	2 26.00	169 17.59
5	AGREE SLIGHTLY	4 18	10 15.87	22 14.97	15 12.71	69 11.44	3 37.50	123 12.80
6	AGREE MODERATELY	7 31.7	18 28.57	38 25.85	32 27.97	134 22.22	1 12.50	231 24.04
7	AGREE STRONGLY	10 45.45	22 34.92	33 22.45	56 47.46	166 27.53	2 25.00	289 30.07
	TOTAL	22 100.00	63 100.00	147 100.00	118 100.00	603 100.00	8 100.00	961 100.00
	TOTAL COL PERCENT	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	VALID N	22	63	147	118	603	8	961
	MEAN ROW VALUE	6.1818	5.5079	4.8844	6.0339	5.0498	5.3750	5.2040
	STANDARD DEVIATION	0.8861	1.7078	1.8882	1.2346	1.7800	1.1110	1.7527
	INVALID DATA	0	0	3	0	12	2	17

APDS/PROMIS QUESTIONNAIRE -- ITEM 3

FEMALE JOB RESERVATIONS REQUIRE LESS TOTAL
TIME UNDER APDS/PROMIS THAN WITH THE
PREVIOUS SYSTEM

RECRUITING SERVICE ORGANIZATIONAL LEVEL

	A	B	C	D	E	.	TOTAL
RESPONSE	GROUP ATTACHMENT	SECTOR	SECTOR	AFEES	AFRO	INVALID	
1 DISAGREE STRONGLY	0 0.00	11 17.74	23 15.54	34 28.81	69 11.54	0 0.00	137 14.33
2 DISAGREE MODERATE	0 0.00	5 8.06	5 3.38	10 8.47	25 4.18	0 0.00	45 4.71
3 DISAGREE SLIGHTLY	2 9.09	5 8.06	12 8.11	14 11.86	53 8.86	0 0.00	86 9.00
4 AGREE NOR DISAGREE	4 18.18	9 14.52	25 16.89	12 10.17	179 29.93	5 62.50	234 24.48
5 AGREE SLIGHTLY	4 18.18	8 12.90	19 12.84	13 11.02	76 12.71	0 0.00	120 12.55
6 AGREE MODERATELY	4 18.18	8 12.90	32 21.62	21 9.32	64 10.70	2 25.00	121 12.66
7 AGREE STRONGLY	8 36.36	16 25.81	32 21.62	24 20.34	132 22.07	1 12.50	213 22.28
TOTAL TOTAL COL PERCENT	22 100.00	62 100.00	148 100.00	118 100.00	598 100.00	8 100.00	956 100.00
VALID N	22	62	148	118	598	8	956
MEAN ROW VALUE	5.5455	4.3871	4.5946	3.7542	4.4849	4.8750	4.4331
STANDARD DEVIATION	1.3727	2.1950	2.0495	2.3030	1.9976	1.1659	2.0094
INVALID DATA	0	1	2	0	17	2	22

APDS/PROMIS QUESTIONNAIRE -- ITEM 4

MALE JOB SALES ARE MADE FASTER UNDER APDS/
PROMIS THAN WITH THE PREVIOUS SYSTEM

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	B DETACHMENT	C SECTOR	D AFEES	E AFRO	* INVALID	TOTAL
1 DISAGREE STRONGLY	0 / 0.00	3 / 4.76	8 / 5.41	4 / 3.39	26 / 4.34	0 / 0.00	41 / 4.28
2 DISAGREE MODERATE	0 / 0.00	1 / 1.59	4 / 2.70	0 / 0.00	13 / 2.17	0 / 0.00	18 / 1.88
3 DISAGREE SLIGHTLY	0 / 0.00	5 / 7.94	6 / 4.05	6 / 5.08	22 / 3.67	0 / 0.00	39 / 4.07
4 AGREE NOR DISAGREE	4 / 18.18	7 / 11.11	19 / 12.84	8 / 6.78	121 / 20.20	1 / 12.50	160 / 16.70
5 AGREE SLIGHTLY	1 / 4.55	13 / 20.63	20 / 13.51	15 / 12.71	79 / 13.19	3 / 37.50	131 / 13.67
6 AGREE MODERATELY	4 / 18.18	13 / 20.63	45 / 30.41	35 / 29.66	140 / 23.37	2 / 25.00	239 / 24.95
7 AGREE STRONGLY	13 / 59.09	21 / 33.33	46 / 31.08	50 / 42.37	198 / 33.06	2 / 25.00	330 / 34.45
TOTAL / TOTAL COL PERCENT	22 / 100.00	63 / 100.00	148 / 100.00	118 / 100.00	599 / 100.00	8 / 100.00	958 / 100.00
VALID N	22	63	148	118	599	8	958
MEAN ROW VALUE	6.1818	5.3651	5.4189	5.8390	5.3806	5.6250	5.4624
STANDARD DEVIATION	1.1535	1.6552	1.6695	1.4495	1.6278	0.9922	1.6113
INVALID DATA	0	0	2	0	16	2	20

APDS/PROMIS QUESTIONNAIRE -- ITEM 5

APDS/PROMIS WITH ITS COMPUTER TERMINALS
PRESENTS A MORE PROFESSIONAL IMAGE OF THE
AIR FORCE TO POTENTIAL ENLISTEES

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	C SECTOR	D AFEES	E AFRO	F INVALID	TOTAL
1 DISAGREE STRONGLY	0 0.00	3 2.00	1 0.85	9 1.47	0 0.00	13 1.33
2 DISAGREE MODERATE	0 0.00	1 0.67	2 1.69	8 1.30	0 0.00	11 1.13
3 DISAGREE SLIGHTLY	0 0.00	3 2.00	0 0.00	7 1.14	1 12.50	12 1.23
4 AGREE NOR DISAGREE	1 4.55	7 4.67	2 1.69	26 4.23	1 12.50	38 3.90
5 AGREE SLIGHTLY	0 0.00	17 11.33	4 3.35	58 9.45	1 12.50	85 8.72
6 AGREE MODERATELY	2 9.09	24 16.00	7 5.93	132 19.67	2< 25.00	173 17.74
7 AGREE STRONGLY	19< 86.36	95< 63.33	102< 86.44	384< 62.54	3 37.50	643< 65.95
TOTAL / TOTAL COL PERCENT	22 100.00	150 100.00	118 100.00	614 100.00	8 100.00	975 100.00
VALID N	22	150	118	614	8	975
MEAN ROW VALUE	6.7727	6.2400	6.6864	6.2866	5.6250	6.2956
STANDARD DEVIATION	0.6196	1.2693	0.9809	1.0184	1.4087	1.1065
INVALID DATA	0	0	0	1	2	3

APDS/PROMIS QUESTIONNAIRE -- ITEM 6

THE MOST APPROPRIATE JOBS FOR THE APPLICANT
AND THE AIR FORCE ARE REFLECTED IN THE
ORDERED LIST OUTPUT FROM OPPORTUNITY.

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	B SECTION	C AFEES	D AFRO	E INVALID	TOTAL
1 DISAGREE STRONGLY	1 / 4.55	4 / 6.35	15 / 10.00	12 / 10.17	55 / 9.03	87 / 8.97
2 DISAGREE MODERATE	0 / 0.00	3 / 7.94	8 / 5.33	10 / 8.47	31 / 5.09	54 / 5.57
3 DISAGREE SLIGHTLY	0 / 0.00	8 / 12.70	11 / 7.33	17 / 14.41	70 / 11.49	106 / 10.93
4 AGREE NOR DISAGREE	6 / 27.27	9 / 14.29	21 / 14.00	18 / 15.25	134 / 22.00	188 / 19.38
5 AGREE SLIGHTLY	5 / 22.73	14 / 22.22	37 / 24.67	29 / 24.19	108 / 17.73	192 / 19.79
6 AGREE MODERATELY	7 / 31.82	14 / 22.22	33 / 22.00	26 / 22.03	121 / 19.87	203 / 20.93
7 AGREE STRONGLY	3 / 13.64	9 / 14.29	25 / 16.67	10 / 8.47	90 / 14.78	139 / 14.33
TOTAL / TOTAL COL PERCENT	22 / 100.00	63 / 100.00	150 / 100.00	118 / 100.00	609 / 100.00	970 / 100.00
VALID N	22	63	150	118	609	970
MEAN ROW VALUE	5.1364	4.6190	4.7067	4.2881	4.5304	4.5567
STANDARD DEVIATION	1.3583	1.7405	1.8204	1.7808	1.7754	1.7760
INVALID DATA	0	0	0	0	2	2

APDS/PROMIS QUESTIONNAIRE -- ITEM 7

THE MOST APPROPRIATE JOBS FOR YOUR APPLICANTS
ARE ALWAYS AVAILABLE FROM THE APDS/PROMIS
JOB BANK.

RECRUITING SERVICE ORGANIZATIONAL LEVEL

	A GROUP DETACHMENT	B	C SICTOM	D AFEES	E AFRO	* INVALID	TOTAL
RESPONSE:							
1 DISAGREE STRONGLY	4 18.18	22 34.92	56 37.33	26 22.03	202 33.01	2 25.00	314 32.07
2 DISAGREE MODERATE	4 18.18	8 12.70	20 13.33	16 13.56	83 13.56	0 0.00	131 13.76
3 DISAGREE SLIGHTLY	1 4.55	8 12.70	21 14.00	29 24.58	119 19.44	0 0.00	184 18.91
4 AGREE NOR DISAGREE	6 27.27	10 15.87	11 7.33	12 10.17	88 14.38	2 25.00	129 13.26
5 AGREE SLIGHTLY	5 22.73	10 15.87	21 14.00	22 18.64	71 11.60	1 12.50	130 13.36
6 AGREE MODERATELY	1 4.55	3 4.76	10 6.67	12 10.17	38 6.21	3 37.50	67 6.87
7 AGREE STRONGLY	1 4.55	2 3.17	5 3.33	1 0.85	11 1.80	0 0.00	20 2.06
TOTAL TOTAL COL PERCENT	22 100.00	63 100.00	150 100.00	118 100.00	612 100.00	8 100.00	973 100.00
VALID N	22	63	150	118	612	8	973
MEAN ROW VALUE	2.5000	2.9206	2.8067	3.2373	2.6382	4.1250	2.9126
STANDARD DEVIATION	1.7255	1.8021	1.6319	1.6908	1.6982	1.9645	1.7393
INVALID DATA	0	0	0	0	3	2	5

APOS/PROBES QUESTIONNAIRE -- ITEM 8

IT WOULD BE BENEFICIAL TO HAVE A GREATER
PERCENTAGE OF FEMALE JOB RECRUITERS
(AS COMPARED TO EACH JOB RECRUITER TYPE)
THAN IS SO TODAY

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE		A GROUP DETACHMENT	B SECTION	C APLES	D AFRO	E INVALID	TOTAL
1	DISAGREE STRONGLY	1 4.55	2 3.17	3 2.03	3 2.54	15 2.44	24 2.46
2	DISAGREE MODERATELY	0 0.00	1 1.59	0 0.00	0 0.00	10 1.63	11 1.03
3	DISAGREE SLIGHTLY	0 0.00	1 1.59	2 1.35	3 2.54	11 1.79	17 1.75
4	AGREE NOR DISAGREE	1 4.55	12 19.05	9 6.08	5 4.24	62 6.08	89 9.14
5	AGREE SLIGHTLY	2 9.09	4 6.35	21 14.19	7 5.93	68 11.06	102 10.47
6	AGREE MODERATELY	6 27.27	14 22.22	19 12.84	15 12.71	105 17.07	159 16.32
7	AGREE STRONGLY	12 54.55	29 46.03	94 63.51	85 72.03	344 56.42	573 58.82
TOTAL		22 100.00	63 100.00	148 100.00	118 100.00	615 100.00	974 100.00
TOTAL COL PERCENT							
VALID N		22	63	148	118	615	974
MEAN ROW VALUE		6.1364	5.7460	6.2297	6.3729	6.0244	6.0842
STANDARD DEVIATION		1.3914	1.5530	1.2653	1.2940	1.4385	1.4103
INVALID DATA		0	0	2	0	0	2

APOS/PROMIS QUESTIONNAIRE -- ITEM 9

MANY MORE FEMALES WHO ARE QUALIFIED IN THE
ADMINISTRATIVE AND GENERAL (A & G) APTITUDE
AREAS ARE SENT TO THE AFEES THAN THERE ARE
JOBS AVAILABLE FOR QUALIFIED FEMALES IN
THE A AND G AREAS

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	GROUP DETACHMENT	SECTOR	AFEES	AFHC	INVALID	TOTAL
1 DISAGREE STRONGLY	0 / 0.00	1 / 1.59	1 / 0.67	1 / 0.85	8 / 1.30	0 / 0.00	11 / 1.13
2 DISAGREE MODERATE	1 / 4.55	1 / 1.59	0 / 0.00	0 / 0.00	1 / 0.16	0 / 0.00	3 / 0.31
3 DISAGREE SLIGHTLY	0 / 0.00	0 / 0.00	1 / 0.67	0 / 0.00	4 / 0.65	0 / 0.00	5 / 0.51
4 AGREE NOR DISAGREE	0 / 0.00	3 / 4.76	3 / 2.00	0 / 0.00	24 / 3.90	0 / 0.00	30 / 3.07
5 AGREE SLIGHTLY	1 / 4.55	5 / 7.94	9 / 6.00	3 / 2.54	30 / 4.88	2 / 25.00	50 / 5.12
6 AGREE MODERATELY	3 / 13.64	7 / 11.11	12 / 8.00	5 / 4.24	74 / 12.03	1 / 12.50	102 / 10.45
7 AGREE STRONGLY	17 / 77.27	46 / 73.02	124 / 82.67	109 / 92.37	474 / 77.07	5 / 62.50	775 / 79.41
TOTAL TOTAL COL PERCENT	22 / 100.00	63 / 100.00	150 / 100.00	118 / 100.00	615 / 100.00	8 / 100.00	976 / 100.00
VALID N	22	63	150	118	615	8	976
MEAN ROW VALUE	6.5455	6.4127	6.6733	6.8559	6.5528	6.2750	6.5973
STANDARD DEVIATION	1.1171	1.2167	0.8602	0.6545	1.0391	0.6570	0.9942
INVALID DATA	0	0	0	0	0	2	2

AFOS/PROS/IS QUESTIONNAIRE -- ITEM 16

THE PRACTICE OF SENDING MANY MORE FEMALE APPLICANTS
(FOR A AND G JOBS) TO THE AFEES THAN THERE
ARE A AND G JOBS AVAILABLE IS DESIRABLE

RECRUITING SERVICE ORGANIZATIONAL LEVEL

		A	B	C	D	E	F	
RESPONSE		GROUP DETACHMENT	SECTOR	AFEES	AFRO	AFRO INVALID	TOTAL	
1	DISAGREE STRONGLY	7 31.82	19 25.40	49 30.20	48 40.68	166 26.87	1 12.50	292 29.9
2	DISAGREE MODERATE	2 9.09	7 11.11	11 7.38	134 11.02	88 6.83	0 0.00	88 8.03
3	DISAGREE SLIGHTLY	1<	6 9.52	20< 13.43	14 11.86	83 12.52	0 0.00	180 12.04
4	AGREE NOR DISAGREE	3 13.64	12< 19.05	19 12.75	17 14.41	131< 21.34	0 0.00	180 12.04
5	AGREE SLIGHTLY	4 18.18	12 19.05	21 14.09	14 11.86	76 12.38	2 25.00	128 13.14
6	AGREE MODERATELY	1 4.55	6 9.52	16 9.72	5 4.24	45 7.33	0 0.00	73 7.39
7	AGREE STRONGLY	2 9.09	4 6.35	20 13.42	7 5.93	51 4.95	2 25.00	95 9.96
TOTAL		22 100.00	63 100.00	149 100.00	118 100.00	614 100.00	8 100.00	974 100.00
TOTAL COL PERCENT		22	63	149	118	614	8	974
VALID N		22	63	149	118	614	6	974
MEAN ROW VALUE		3.2727	3.4921	3.5302	2.9220	3.4564	4.2800	3.1043
STANDARD DEVIATION		2.0091	1.9262	2.1500	1.9117	1.9780	1.4790	2.0003
INVALID DATA		0	0	1	0	1	2	4

APOS/PROMIS QUESTIONNAIRE -- ITEM 11

A RECRUITER SHOULD PRESCREEN APPLICANTS TO
INSURE THEIR GENERAL QUALIFICATIONS/CHARACTERISTICS
ARE REASONABLY CONSISTENT WITH CURRENT AF JOB
REQUIREMENTS PRIOR TO SENDING THEM TO THE AFEES

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	H	C SECTOR	D AFEES	L AFRO	* INVALID	TOTAL
1 DISAGREE STRONGLY	2 9.52	10 15.87	27 18.00	8 6.78	62 10.11	0 0.00	104 11.20
2 DISAGREE MODERATE	2 9.52	3 4.76	4 2.67	1 0.85	17 2.77	1 12.50	28 2.88
3 DISAGREE SLIGHTLY	1 4.76	3 4.76	8 5.33	7 5.93	24 3.92	0 0.00	43 4.92
4 AGREE NOR DISAGREE	1 4.76	2 3.17	11 7.33	7 5.93	51 8.32	1 12.50	73 7.50
5 AGREE SLIGHTLY	3 14.29	9 14.29	10 6.67	15 12.71	64 10.44	1 12.50	102 10.46
6 AGREE MODERATELY	3 14.29	12 19.05	20 13.33	14 11.86	97 15.82	3 37.50	149 15.31
7 AGREE STRONGLY	9 42.86	24 38.10	70 46.67	66 55.93	298 48.61	2 25.00	469 48.20
TOTAL	21	63	150	118	613	8	973
TOTAL COL PERCENT	100.00	100.00	100.00	100.00	100.00	100.00	100.00
VALID N	21	63	150	118	613	8	973
MEAN ROW VALUE	5.1906	5.0476	5.0867	5.7627	5.4812	5.3750	5.6193
STANDARD DEVIATION	2.1071	2.2142	2.3236	1.7977	1.9947	1.5742	2.0515
INVALID DATA	1	0	0	0	2	2	5

PRIOR TO THE IMPLEMENTATION OF APOS/PROMIS YOU
WERE PRESENTED WITH INFORMATION CONCERNING ITS
CONCEPT, MANAGEMENT, AND OPERATION. APOS/PROMIS
HAS FULFILLED ITS ADVERTISED GOALS

	RESPONSE	GROUP DETACHMENT		SECTOR	RECRUITING SERVICE ORGANIZATIONAL LEVEL			TOTAL
		A	B	C	AFELS	AFRO	INVALID	
					D	E	F	
1	DISAGREE STRONGLY	1 / 4.55	1 / 1.64	9 / 4.04	5 / 4.24	36 / 6.07	0 / 0.00	52 / 4.97
2	DISAGREE MODERATE	1 / 4.55	3 / 4.92	9 / 4.03	3 / 2.54	14 / 2.36	2 / 0.00	27 / 2.84
3	DISAGREE SLIGHTLY	4 / 18.18	8 / 13.11	12 / 8.05	8 / 6.78	35 / 5.90	1 / 12.50	68 / 7.15
4	AGREE NOR DISAGREE	1 / 4.55	9 / 14.75	33 / 22.15	11 / 9.32	123 / 30.66	3 / 37.50	240 / 25.24
5	AGREE SLIGHTLY	5 / 22.73	30 / 16.39	29 / 19.46	24 / 20.34	94 / 15.85	1 / 12.50	162 / 17.04
6	AGREE MODERATELY	5 / 22.73	23 / 37.70	39 / 22.17	41 / 34.75	159 / 26.81	3 / 37.50	270 / 28.39
7	AGREE STRONGLY	5 / 22.73	7 / 11.48	21 / 14.09	26 / 22.03	72 / 12.14	0 / 0.00	131 / 13.77
	TOTAL	22 / 100.00	61 / 100.00	149 / 100.00	118 / 100.00	593 / 100.00	8 / 100.00	951 / 100.00
	TOTAL COL PERCENT	22 / 100.00	61 / 100.00	149 / 100.00	118 / 100.00	593 / 100.00	8 / 100.00	951 / 100.00
	VALID N	22	61	149	118	593	8	951
	MEAN FOR VALUE	4.9545	4.9836	4.7987	5.3136	4.7707	4.2500	4.8765
	STANDARD DEVIATION	1.7045	1.4876	1.6502	1.5407	1.5587	1.0897	1.5761
	INVALID N	0	2	1	0	22	2	27

APOS/PROMIS QUESTIONNAIRE -- ITEM 13

THE AMOUNT OF TIME SCHEDULED FOR THE SYSTEM TO
OPERATE EACH DAY IS SATISFACTORY

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	B SECTOR	C SECTOR	D AFEES	E AFRC	* INVALID	TOTAL
1 DISAGREE STRONGLY	0 0.00	5 8.40	8 5.41	2 1.69	27 4.96	0 0.00	44 4.37
2 DISAGREE MODERATE	0 0.00	2 3.28	5 3.38	1 0.85	24 3.64	0 0.00	30 3.12
3 DISAGREE SLIGHTLY	1 4.55	5 4.20	11 7.43	4 3.39	30 4.96	0 0.00	51 5.30
4 AGREE NOR DISAGREE	4 18.18	4 6.56	34 21.62	3 2.54	228 37.69	1 12.50	274 28.27
5 AGREE SLIGHTLY	2 9.09	14 22.95	27 18.24	8 6.78	67 11.07	2 25.00	123 12.77
6 AGREE MODERATELY	8 36.36	19 31.15	41 27.70	34 28.81	141 23.31	4 50.00	247 25.66
7 AGREE STRONGLY	7 31.82	12 19.67	24 16.22	66 55.93	90 14.88	1 12.50	200 20.79
TOTAL TOTAL COL PERCENT	22 100.00	61 100.00	148 100.00	118 100.00	605 100.00	8 100.00	962 100.00
VALID N	22	61	148	118	605	8	962
MEAN ROW VALUE	5.7273	5.0492	4.9189	6.2203	4.7669	5.6250	5.0156
STANDARD DEVIATION	1.2129	1.7595	1.6129	1.2428	1.5461	0.8570	1.6007
INVALID DATA	0	2	2	0	10	2	16

THE AMOUNT OF UNSCHEDULED WORK-TIME FOR APDS/PHONES
IS NOT EXCESSIVE.

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE		A GROUP DETACHMENT	B SECTION	C AREES	D APRES	E AFRO	• INVALID	TOTAL
1	DISAGREE STRONGLY	10 45.45	15 24.59	20 13.61	48 41.88	38 5.97	0 0.00	130 13.57
2	DISAGREE MODERATE	3< 13.64	10 16.39	8 5.44	15< 12.82	18 2.84	0 0.00	54 5.64
3	DISAGREE SLIGHTLY	2 9.09	8< 13.11	17 11.56	17 14.53	58 9.29	0 0.00	100 10.44
4	AGREE NOR DISAGREE	5 22.73	15 24.59	43< 29.25	8 5.13	254< 42.95	2< 62.50	333< 34.97
5	AGREE SLIGHTLY	0 0.00	5 8.20	15 10.20	12 10.26	66 10.96	2 25.00	100 10.44
6	AGREE MODERATELY	1 4.55	5 8.20	24 16.33	8 6.84	112 18.57	1 12.50	151 15.76
7	AGREE STRONGLY	1 4.55	3 4.92	20 13.61	10 8.55	56 9.29	0 0.00	90 9.39
TOTAL		22	61	147	117	603	8	958
TOTAL COL PERCENT		100.00	100.00	100.00	100.00	100.00	100.00	100.00
VALID N		22	61	147	117	603	8	958
MEAN ROW VALUE		2.5000	3.1967	4.2041	2.8376	4.4276	4.5000	4.0772
STANDARD DEVIATION		1.7516	1.7909	1.8697	1.8846	1.8016	0.7071	1.9679
INVALID DATA		0	2	3	1	12	2	20

APDS/PROMIS QUESTIONNAIRE -- ITEM 14

THE AVE RES VALUE AS DEFINED IN THE MANAGEMENT
EMPHASIS PROGRAM (MEP) IS THE BEST WAY OF
INSURING THE OPTIMAL MATCH OF PEOPLE TO JOBS
(I.E. RESERVING THE JOBS AT THE TOP OF THE LIST).

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	B SECTOR	C SECTOR	D AFEES	. AFNO	. INVALID	TOTAL
1 DISAGREE STRONGLY	4 / 19.05	3 / 5.08	13 / 9.03	17 / 14.91	36 / 6.05	2 / 25.00	75 / 7.97
2 DISAGREE MODERATE	1 / 4.76	4 / 6.78	8 / 5.56	10 / 8.77	16 / 2.69	0 / 0.00	39 / 4.14
3 DISAGREE SLIGHTLY	3 / 14.29	7 / 11.86	13 / 9.03	10 / 8.77	45 / 7.56	0 / 0.00	78 / 8.29
4 AGREE NOR DISAGREE	8< / 38.10	25< / 42.37	57< / 39.58	32< / 28.07	283< / 47.56	2< / 25.00	407< / 43.25
5 AGREE SLIGHTLY	2 / 9.52	9 / 15.25	24 / 16.67	22 / 19.30	103 / 17.31	2 / 25.00	162 / 17.22
6 AGREE MODERATELY	2 / 9.52	9 / 15.25	20 / 13.89	13 / 11.40	74 / 12.44	2 / 25.00	120 / 12.75
7 AGREE STRONGLY	1 / 4.76	2 / 3.39	9 / 6.25	10 / 8.77	38 / 6.39	0 / 0.00	60 / 6.38
TOTAL / TOTAL COL PERCENT	21 / 100.00	59 / 100.00	144 / 100.00	114 / 100.00	595 / 100.00	8 / 100.00	941 / 100.00
VALID N	21	59	144	114	595	8	941
MEAN ROW VALUE	3.6190	4.1525	4.1597	3.9737	4.3025	4.0000	4.2136
STANDARD DEVIATION	1.6755	1.3755	1.5441	1.7940	1.3717	1.8708	1.4753
INVALID DATA	1	4	6	4	20	2	37

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APOS/PROMIS QUESTIONNAIRE -- ITEM 16

THE BEST WAY TO MEET AIR FORCE REQUIREMENTS
INVOLVES A COOPERATIVE EFFORT BETWEEN RECRUITER
AND AFEES LIAISON PERSONNEL. THEREFORE,
A RECRUITING INCENTIVE PROGRAM WHICH
IS BASED ON APPLICANT FLOW TO AFEES BY
RECRUITERS IS DESIRABLE

RECRUITING SERVICE ORGANIZATIONAL LEVEL

	RESPONSE	A GROUP DETACHMENT	B SECTOR	C AFEES	D AFRO	E INVALID	TOTAL
1	DISAGREE STRONGLY	3 / 13.64	2 / 3.17	13 / 8.67	10 / 4.37	51 / 0.00	79 / 8.14
2	DISAGREE MODERATE	0 / 0.00	3 / 4.76	5 / 3.33	10 / 1.64	22 / 0.00	44 / 2.27
3	DISAGREE SLIGHTLY	0 / 0.00	3 / 4.76	5 / 3.33	30 / 4.93	0 / 0.00	44 / 4.54
4	AGREE NOR DISAGREE	4 / 18.18	13 / 22.63	15 / 10.00	101 / 16.58	2 / 25.00	142 / 14.74
5	AGREE SLIGHTLY	2 / 9.09	11 / 17.46	17 / 11.33	105 / 17.24	2 / 25.00	152 / 15.67
6	AGREE MODERATELY	4 / 18.18	10 / 15.87	25 / 16.67	125 / 20.53	0 / 0.00	187 / 19.28
7	AGREE STRONGLY	9 / 40.91	21 / 33.33	70 / 46.67	187 / 30.71	4 / 50.00	343 / 35.36
	TOTAL / TOTAL COL PERCENT	27 / 100.00	63 / 100.00	150 / 100.00	609 / 100.00	8 / 100.00	970 / 100.00
	VALID N	22	63	150	609	8	970
	MEAN ROW VALUE	5.2727	4.2540	5.7867	5.4681	5.9500	5.2680
	STANDARD DEVIATION	2.0257	1.6616	1.9276	1.9164	1.2990	1.8362
	INVALID DATA	0	0	0	0	2	2

APDS/PROMIS QUESTIONNAIRE -- ITEM 17

A RECRUITING INCENTIVE PROGRAM FOR AFEES
LIAISON PERSONNEL IS DESIRABLE

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	B SECTOR	C AFCES	D AFCES	E AFRO	* INVALID	TOTAL
1 DISAGREE STRONGLY	0 / 0.00	3 / 4.76	10 / 6.67	24 / 20.34	40 / 6.51	0 / 0.00	77 / 7.90
2 DISAGREE MODERATE	0 / 0.00	0 / 0.00	5 / 3.33	1 / 0.85	16 / 2.61	0 / 0.00	22 / 2.26
3 DISAGREE SLIGHTLY	1 / 4.55	1 / 1.59	3 / 2.00	2 / 1.69	17 / 2.77	0 / 0.00	29 / 2.96
4 AGREE NON DISAGREE	0 / 0.00	4 / 6.35	12 / 8.00	17 / 14.41	96 / 15.64	3 / 37.50	132 / 13.54
5 AGREE SLIGHTLY	5 / 22.73	12 / 19.05	9 / 6.00	10 / 8.47	82 / 13.36	3 / 37.50	121 / 12.41
6 AGREE MODERATELY	4 / 18.18	8 / 12.70	21 / 14.00	16 / 13.56	126 / 20.52	0 / 0.00	170 / 18.26
7 AGREE STRONGLY	12 / 54.55	35 / 55.56	87 / 58.00	48 / 40.68	237 / 38.60	2 / 25.00	421 / 43.18
TOTAL / TOTAL COL PERCENT	22 / 100.00	63 / 100.00	150 / 100.00	118 / 100.00	614 / 100.00	8 / 100.00	975 / 100.00
VALID N	22	63	150	118	614	8	975
MEAN ROW VALUE	6.1818	5.9524	5.8333	4.9322	5.9267	5.1250	5.9779
STANDARD DEVIATION	1.0218	1.5268	1.8200	2.3023	1.7638	1.1669	1.8390
INVALID DATA	0	0	0	0	1	2	3

A COMBINED RECRUITING INCENTIVE PROGRAM WHICH IS
BASED ON BOTH APPLICANT FLOW TO THE AFEES AND
THE MOST APPROPRIATE PERSON-JOB-MATCH AT THE
AFEES SHOULD BE INSTITUTED.

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	B SECTOR	C AFEES	D AFRO	E INVALID	TOTAL
1 DISAGREE STRONGLY	4 / 18.18	2 / 3.23	17 / 11.33	17 / 15.91	54 / 8.84	0 / 0.00	94 / 9.68
2 DISAGREE MODERATE	2 / 9.09	3 / 4.84	5 / 3.33	3 / 2.84	19 / 3.11	0 / 0.00	32 / 3.30
3 DISAGREE SLIGHTLY	0 / 0.00	4 / 6.45	8 / 5.33	8 / 6.78	28 / 4.58	0 / 0.00	48 / 4.94
4 AGREE NON DISAGREE	3 / 13.64	16 / 25.81	19 / 12.67	22 / 18.64	130 / 21.28	3 / 37.50	193 / 19.88
5 AGREE SLIGHTLY	6 / 27.27	11 / 17.74	19 / 9.33	19 / 16.10	102 / 16.69	2 / 25.00	154 / 15.86
6 AGREE MODERATELY	1 / 4.55	11 / 17.74	24 / 16.00	15 / 12.71	117 / 19.15	1 / 12.50	169 / 17.40
7 AGREE STRONGLY	6 / 27.27	15 / 24.19	63 / 42.00	34 / 28.81	161 / 26.35	2 / 25.00	281 / 28.94
TOTAL / TOTAL COL PERCENT	22 / 100.00	62 / 100.00	150 / 100.00	118 / 100.00	611 / 100.00	8 / 100.00	971 / 100.00
VALID N	22	62	150	118	611	8	971
MEAN ROW VALUE	4.4545	5.0000	5.2133	4.7288	4.9673	5.2500	4.9691
STANDARD DEVIATION	2.1685	1.8164	2.0610	2.0488	1.8260	1.1990	1.8702
INVALID DATA	0	1	0	0	4	2	7

APOS/PROMIS QUESTIONNAIRE -- ITEM 19

EXCESSIVE EMPHASIS IS CURRENTLY PLACED ON
PROCESSING FEMALES FOR ADMINISTRATIVE AND
GENERAL APTITUDE AREA JOBS SINCE THESE
REQUIREMENTS ARE USUALLY FILLED.

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	B SECTOR	C SECTOR	D AFEES	E AFRO	* INVALID	TOTAL
1 DISAGREE STRONGLY	2 / 9.09	9 / 14.29	32 / 21.48	6 / 5.08	101 / 16.50	4 / 57.14	154 / 15.91
2 DISAGREE MODERATE	2 / 9.09	5 / 7.94	13 / 8.72	4 / 3.39	47 / 7.72	1 / 14.29	72 / 7.44
3 DISAGREE SLIGHTLY	6 / 27.27	8 / 12.70	18 / 12.08	15 / 12.71	65 / 10.67	0 / 0.00	112 / 11.57
4 AGREE NOR DISAGREE	5 / 22.73	19 / 30.16	29 / 19.46	25 / 21.19	199 / 32.68	1 / 14.29	278 / 28.72
5 AGREE SLIGHTLY	3 / 13.64	15 / 23.81	26 / 17.45	14 / 11.86	87 / 14.29	0 / 0.00	145 / 14.98
6 AGREE MODERATELY	2 / 9.09	4 / 6.35	15 / 10.07	19 / 16.10	56 / 9.20	0 / 0.00	96 / 9.92
7 AGREE STRONGLY	2 / 9.09	3 / 4.76	16 / 10.74	35 / 29.66	53 / 8.87	1 / 14.29	111 / 11.47
TOTAL / TOTAL COL PERCENT	22 / 100.00	63 / 100.00	149 / 100.00	118 / 100.00	609 / 100.00	7 / 100.00	968 / 100.00
VALID N	22	63	149	118	609	7	968
MEAN ROW VALUE	3.8636	3.7937	3.7584	4.9831	3.8342	2.4286	3.9504
STANDARD DEVIATION	1.6596	1.4150	1.4718	1.7850	1.7858	2.1385	1.8504
INVALID DATA	0	0	1	0	6	3	10

A LARGE NUMBER OF OPPORTUNITY TRANSACTIONS PER
APPLICANT SERIOUSLY IMPACTS THE RESPONSE TIME
OF APDS/PROMIS FOR ALL USERS. THIS INHIBITS
YOUR ABILITY TO PROCESS AVAILABLE APPLICANTS.

RESPONSE	A	B	C	D	E	TOTAL
	GROUP DETACHMENT	SECTOR	AFEES	AFRO	INVALID	
1 DISAGREE STRONGLY	0 0.00	3 4.04	13 6.90	3 2.54	56 9.23	0 0.00	76 7.80
2 DISAGREE MODERATE	0 0.00	3 4.04	4 2.74	2 1.69	37 6.10	0 0.00	46 4.78
3 DISAGREE SLIGHTLY	3 13.64	4 6.45	13 6.90	3 2.54	52 8.57	0 0.00	75 7.80
4 AGREE NOR DISAGREE	5 22.73	13 20.97	56 30.36	14 11.86	256 42.17	3 36.07	347
5 AGREE SLIGHTLY	2 9.09	21 33.87	29 15.75	25 20.34	99 16.31	2 26.67	171 17.78
6 AGREE MODERATELY	2 9.09	4 6.45	19 13.01	19 16.10	53 8.73	0 0.00	98 10.14
7 AGREE STRONGLY	10 45.45	14 32.58	16 12.33	53 44.92	54 8.90	3 14.29	150 15.59
TOTAL	22 100.00	62 100.00	146 100.00	118 100.00	607 100.00	7 100.00	962
TOTAL COL PERCENT	22	62	146	118	607	7	962 100.00
VALID N	22	62	146	118	607	7	962
MEAN ROW VALUE	5.5000	4.0887	4.3767	5.7373	4.1253	3.0000	4.4418
STANDARD DEVIATION	1.5394	1.6184	1.4911	1.5379	1.5379	1.0690	1.6622
INVALID DATA	0	1	0	0	0	3	16

APOS/PROMIS QUESTIONNAIRE -- ITEM 21

THE MAXIMUM NUMBER OF OPPORTUNITY TRANSACTIONS
PER APPLICANT EACH DAY SHOULD BE:

RECRUITING SERVICE ORGANIZATIONAL LEVEL

	A	B	C	D	E	*	TOTAL
	GROUP DETACHMENT	SECTOR		AFEES	AFRO	INVALID	
RESPONSE							
A 1-2	2 9.09	13 21.67	25 17.36	46 39.32	95 16.30	1 14.29	132 19.51
B 3-9	8 36.36	21 35.00	41 28.47	39 33.33	152 26.07	0 0.00	261 27.97
C 10-19	9 40.91	7 11.67	24 16.67	9 7.69	108 18.52	0 0.00	157 16.83
D 20-29	0 0.00	5 8.33	6 4.17	1 0.85	17 2.92	1 14.29	30 3.22
E UNLIMITED	3 13.64	14 23.33	48 33.33	22 18.80	211 36.19	5 71.43	302 32.48
TOTAL / TOTAL COL PERCENT	22 100.00	60 100.00	144 100.00	117 100.00	583 100.00	7 100.00	933 100.00
INVALID DATA	0	3	6	1	32	3	45

FACTOR WHICH MIGHT BE PART OF THE PERSON-JOB-MATCH
RELATIONSHIP OF APPLICANT TO DIFFICULTY OF JOB

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE		A	B	C	D	E	
		GROUP DETACHMENT	SECTOR	AFEES	AFRO	INVALID	TOTAL
N	NO	2 / 9.09	11 / 17.74	27 / 18.12	17 / 14.41	1 / 12.50	178 / 17.98
U	UNSURE	2 / 9.09	6 / 9.68	16 / 10.74	16 / 13.56	2 / 25.00	189 / 18.58
Y	YES	18 / 81.82	45 / 72.58	106 / 71.14	85 / 72.03	5 / 62.50	849 / 66.63
TOTAL TOTAL COL PERCENT		22 / 100.00	62 / 100.00	149 / 100.00	118 / 100.00	8 / 100.00	966 / 100.00
INVALID DATA		0	1	1	0	0	2

BPDS/PROMIS QUESTIONNAIRE -- ITEM 2•

FACTOR WHICH MIGHT BE PART OF THE PERSON-JOB-MATCH
COST OF TRAINING APPLICANT VS PROBABILITY OF NOT
COMPLETING TRAINING

RECRUITING SERVICE ORGANIZATIONAL LEVEL

	A	C	D	E	*	TOTAL
	GROUP DETACHMENT	SECTOR	AFEES	AFRO	INVALID	
RESPONSE						
N NO	11 50.00	57 38.26	30 25.42	242 39.87	4 50.00	374 38.72
U UNSURE	5 22.73	24 16.77	19 16.10	126 19.77	2 25.00	177 18.32
Y YES	6 27.27	70 46.98	69 58.47	295 46.36	2 25.00	415 42.96
TOTAL TOTAL COL PERCENT	22 100.00	149 100.00	118 100.00	607 100.00	8 100.00	966 100.00
INVALID DATA	0	1	0	8	2	12

APOS/PHONIS QUESTIONNAIRE -- ITEM 25

FACTOR WHICH MIGHT BE KEPT BY THE RESPONDENT WHICH
PREFERENCE FOR INDIVIDUAL AIR FORCE SPECIALTIES

RECRUITING SERVICE ORGANIZATIONAL LEVEL

	A HQ DETACHMENT	B SECTOR	C AFEES	D AFRO	E INVALID	TOTAL
RESPONSE	1	13	29	17	104	2	164
	.55	7.27	14.48	14.41	16.87	25.00	16.48
UNSURE	2	2	4	3	45	1	57
	4.76	10.3	2.04	2.54	7.41	12.50	5.90
YES	15	47	116	98	440	5	745
	96.34	75.01	77.45	83.05	75.78	62.50	77.12
TOTAL	72	82	189	118	607	8	966
TOTAL COL PERCENT	9.34	100.00	100.00	100.00	100.00	100.00	100.00
INVALID DATA		1	1	0	8	2	12

AFCS/PROMIS QUESTIONNAIRE -- ITEM 26

FACTOR WHICH MIGHT BE PART OF THE PERSON-JOB-MATCH
PREFERENCE FOR THE BROAD ENLISTMENT APTITUDE AREAS
(I.E. M, A, G, E AREAS)

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	GROUP DETACHMENT	SECTOR	AFEES		AFRO	INVALID	TOTAL
N NO	2 9.09	8 12.90	16 10.74	9 7.63	52 6.55	3 37.50	90 9.31
U UNSURE	1 4.55	1 1.61	11 7.38	3 2.54	5 8.88	2 25.00	? ?.?
Y YES	19 86.36	53 85.48	122 81.88	106 89.83	527 82.57	3 37.50	? ?.?
TOTAL TOTAL COL PERCENT	22 100.00	62 100.00	149 100.00	118 100.00	808 100.00	8 100.00	967 100.00
INVALID DATA	0	1	1	0	1	2	11

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APU5/PHONE QUESTIONNAIRE -- (PAGE 2)

PAPER WHICH MIGHT...

PREDICTING COMPLETION OF TECHNICAL TRAINING

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE		GROUP DETACHMENT	SECTION	AFEES	AFRO	INVALID	TOTAL

APDS/PROMIS QUESTIONNAIRE -- ITEM 2n

FACTOR WHICH MIGHT BE PART OF THE PERSON-JOB-MATCH
EXPERIENCE IN CIVILIAN JOB SKILLS

RECRUITING SERVICE ORGANIZATIONAL LEVEL

	A	B	C	D	E	*	TOTAL
RESPONSE	GROUP DETACHMENT	SECTOR	AFEES	AFRO	AFRO	INVALID	
N ── NO	15 / 68.18	34 / 58.06	88 / 59.73	98 / 83.90	360 / 54.11	4 / 50.00	603 / 62.29
U ── UNSURE	1 / 4.55	7 / 11.29	12 / 8.05	0 / 0.00	84 / 12.48	1 / 12.50	97 / 10.02
Y ── YES	6 / 27.27	19 / 33.05	48 / 32.21	19 / 16.10	173 / 26.01	3 / 37.50	268 / 27.69
TOTAL TOTAL COL PERCENT	22 / 100.00	62 / 100.00	149 / 100.00	118 / 100.00	609 / 100.0	8 / 100.00	968 / 100.00
INVALID DATA	0	1	1	0	6	2	10

FACTOR WHICH MIGHT BE PART OF THE PERSON-JOB-MATCH
THE SELECTION OF AN AIR FORCE SPECIALTY TO DATE

RECRUITING SERVICE ORGANIZATIONAL LEVEL

	A	B	C	D	E		
	GROUP ELEMENT	GROUP ELEMENT	SECTOR	AFEES	AFRO	INVALID	TOTAL
RESPONSE							
N	1	15	34	22	158	1	231
	4.76	24.19	22.82	18.64	26.37	12.50	23.09
U	2	13	34	13	158	5	225
	9.52	25.47	22.82	11.02	26.37	62.50	23.34
Y	14	33	81	83	290	2	500
YES	45.71	54.84	54.36	70.34	47.05	25.00	53.70
TOTAL							
TOTAL COL PERCENT	21	62	149	118	606	8	964
	100.00	100.00	100.00	100.00	100.00	100.00	100.00
INVALID DATE	1	1	1	0	4		34

APDS/PROMIS QUESTIONNAIRE -- ITEM 3?

FACTOR WHICH MIGHT BE PART OF THE PERSON-JOB-MATCH
QUOTAS FOR MINORITY GROUPS

RECRUITING SERVICE ORGANIZATIONAL LEVEL

	A GROUP DETACHMENT	B SECTOR	C AFEES	D AFRO	E AFRO	. INVALID	TOTAL
RESPONSE							
N NO	3 13.64	25 40.32	50 39.68	45 38.14	250 41.25	5 62.50	387 40.10
U UNSURE	3 13.64	6 9.68	33 22.15	25 21.19	185 30.53	2 25.00	254 26.22
Y YES	16 72.73	31 50.00	57 38.26	48 40.68	171 28.22	1 12.50	324 33.68
TOTAL / TOTAL COL PERCENT	22 100.00	62 100.00	149 100.00	118 100.00	606 100.00	8 100.00	965 100.00
INVALID DATA	0	1	1	0	9	2	13

APPENDIX/QUESTIONNAIRE -- ITEM 31

FACTOR WHICH MIGHT BE PART OF THE PERSON-JOB-MATCH
THE DEGREE OF EQUITABLE DISTRIBUTION OF MINORITIES
ACROSS AIR FORCE JOBS

		GROUP DETACHMENT		SECTOR		AFEES		AFRO		INVALID		TOTAL
RESPONSE		4	3		1		0		3		0	
A	DEGREE	4	20	40.20	45	44.44	35	217	606	100.00	4	325
B	SCS	18.18	54.22	27.52	81	26.84	184	205	100.00	2	300
C	DEGREE	4	27	42.20	85	41.53	89	184	30.30	4	341
D	NO	7	41.10	42.20	84	26.31	34	100.00	4	25.00	2	341
E	RESPONSE	22	100.00	100.00	191	100.00	118	606	100.00	2	996
	TOTAL											
	TOTAL COL PERCENT											100.00
	INVALID DATA	0	2		1		0		9		2	15

RECRUITING SERVICE ORGANIZATIONAL LEVEL

APUS/PROMIS QUESTIONNAIRE -- ITEM 32

FACTOR WHICH MIGHT BE PART OF THE PERSON-JOB-MATCH
PROBABILITY OF RE-ENLISTING

RECRUITING SERVICE ORGANIZATIONAL LEVEL

RESPONSE	A GROUP DETACHMENT	B SECTOR	C AFEES	D AFRO	E INVALID	e INVALID	TOTAL
N NO	18 81.82	41 66.13	114 76.51	87 73.73	422 69.52	5 62.50	687 71.12
U UNSURE	4 18.18	12 19.35	25 16.78	18 15.25	136 22.41	2 25.00	197 20.39
Y YES	0 0.00	9 14.52	10 6.71	13 11.02	49 8.07	1 12.50	82 8.49
TOTAL TOTAL COL PERCENT	22 100.00	62 100.00	149 100.00	118 100.00	607 100.00	8 100.00	966 100.00
INVALID DATA	0	1	1	0	8	2	12

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DISTRIBUTION

APPENDIX F: SUMMARY OF OPERATIONAL DATA ANALYZED

From December 1976 thru April 1977, there were 128,649 Person-Job Match (PJM) attempts. Of these, 38,010 were actual reservations, but some were two or more reservations by one person. However, the number of persons with more than one reservation is probably very small and no attempt was made to edit duplicate reservations from the 38,010.

Of the 38,010 reservation –

32,314 males	85.01%
5,696 females	14.99%
14,387 had no preference	37.85%
23,623 indicated a preference	62.15%
5,247	13.80% assigned into Administrative (A) area job
5,509	14.49% assigned into Electronics (E) area job
11,622	30.58% assigned into General (G) area job
15,632	41.13% assigned into Mechanical (M) area job

The following data indicate the position on the list of 15 or 16 Air Force Speciality Codes (AFSCs) which recruits chose.

Position of chosen AFSC on list		%	
1	8,052	21.18	
2	4,433	11.66	43.52%
3	4,059	10.68	
4	2,802	7.37	
5	2,369	6.23	
6	2,083	5.48	
7	1,800	4.74	
8	1,555	4.09	
9	1,368	3.60	
10	1,258	3.31	
11	1,120	2.95	
12	931	2.45	
13	966	2.54	
14	901	2.37	
15	858	2.26	
16	3,455	9.09	
	38,010		

Of the 38,010 reservations:

23,623 indicated a preference – of these 23,623 which indicated a preference, 8,949 got their preference (37.88% of 23,623). Another way to say it is that 21.92% of all the recruits got their preference.

23,623 indicated preference
8,949 got their preference
14,674 did not get their preference

14,387 did not indicate a preference. A closer look at the 8,949 recruits who got their preference reveals that 30.18% reserved a job in the top three AFSCs on the list and 34.55% reserved job 16 on the list.

This indicates that a recruit, in indicating a preference, will select jobs lower on the list.

The 5,509 recruits which picked E-area AFSC's.

1,082   19.64 female
4,427   80.36 males

2,865   52.01 had no preference
2,644   47.99 had a preference

Position on list of AFSC choosen	%	
1. 1,273	23.11	
2. 659	11.96	47.81
3. 702	12.74	
4. 503	9.13	
5. 384	6.97	
6. 290	5.26	
7. 241	4.37	
8. 207	3.76	
9. 179	3.25	
10. 181	3.29	
11. 123	2.23	
12. 127	2.31	
13. 151	2.74	
14. 138	2.50	
15. 151	2.74	
16. 200	3.63	
5,509		

Comparing the E-area assignments with the total (M, A, G, and E) assignments, a greater percentage of recruits choose from the top three jobs in the E-area assignments than the total assignments.

The following set of data breakdown to show the distribution by month

Position of list	December 1976		January 1977		February 1977		March 1977		April 1977	
	N	%	N	%	N	%	N	%	N	%
1	1,847	17.31	1,392	21.39	1,407	19.30	1,668	22.91	1,738	27.77
2	1,070	10.21	652	10.02	843	11.56	875	12.02	993	15.87
3	962	9.01	601	9.23	633	8.68	846	11.62	1,017	16.25
4	719		459		507		552		585	
5	588		443		483		471		384	
6	558		320		473		434		298	
7	477		317		421		342		243	
8	448		270		326		315		196	
9	418		247		302		258		143	
10	384		227		265		228		154	
11	374		215		222		186		123	
12	336		170		181		176		68	
13	337		185		205		168		71	
14	334		168		164		171		44	
15	334		168		165		131		60	
16	1,486	13.92	675	10.37	693	9.31	459	6.30	142	2.27
Total	10,672		6,509		7,290		7,280		6,259	
Total position 1, 2 & 3		36.53		40.64		39.54		46.55		59.89

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From December 1976 to April 1977, a steady improvement is shown in the assignment on the top three of list. A greater percentage of recruits are selecting form the three top AFSCs on the list.

Of the 38,010 reservations. 8,949 recruits reserved the AFSC for which they expressed a preference. This means that 29,679 actually choose a job from the list, the 8,949 got their preference and therefore did not choose. If the 8,949 are deleted, the data below shows that a greater percentage actually selected either AFSCs for position 1, 2, or 3. Meaning that preference does lead to less optimal assignments. Making the assumption that the higher the AFSC is on the list, the more optimal the assignment.

Position of list	N	%	
1	7,141	24.57	
2	3,478	11.97	48.28%
3	3,411	11.74	
4	2,315		
5	1,985		
6	1,736		
7	1,517		
8	1,344		
9	1,149		
10	1,057		
11	910		
12	772		
13	779		
14	747		
15	720		
Total	29,061		

48.28% of the 29,061 vs 43.52% for the 38,010 selected from the top three AFSCs.

The next set of data shows the position on the list of 15 or 16 jobs of the jobs chosen by months December 1976 to April 1977.

Position on list	December 1976 N	December 1976 %	January 1977 N	January 1977 %	February 1977 N	February 1977 %	March 1977 N	March 1977 %	April 1977 N	April 1977 %
1	304	15.79	164	15.20	213	25.94	321	34.97	271	35.38
2	237	12.31	105	9.73	101	12.30	107	11.66	109	14.23
3	264	13.71	120	11.12	101	12.30	104	11.33	113	14.75
4	164	8.52	96	8.90	88	10.72	87	9.48	68	8.88
5	117	6.08	92	8.53	50	6.09	71	7.73	54	7.05
6	91	4.73	74	6.86	40	4.87	55	5.99	30	3.92
7	93	4.83	67	6.21	27	3.29	25	2.72	29	3.79
8	82	4.26	50	4.63	20	2.44	35	3.81	20	2.61
9	75	3.90	37	3.43	34	4.14	17	1.85	16	2.09
10	74	3.84	51	4.73	27	3.29	14	1.53	15	1.96
11	50	2.60	33	3.06	16	19.49	9	.98	15	1.96
12	59	3.06	29	2.69	18	2.19	13	1.42	8	1.04
13	75	3.90	36	3.34	21	2.56	15	1.63	4	.52
14	56	2.91	39	3.61	16	1.95	22	2.40	5	.65
15	79	4.10	35	3.24	20	2.44	11	1.20	6	.78
16	105	5.45	51	4.73	29	3.53	12	1.31	3	.39
Total	1,925		1,079		821		918		766	
Total position 1, 2 & 3		41.81		36.05		50.54		57.96		64.36

Average absolute deviation about the AFSC
  |AFSC difficulty — t-score|.

To compute, the difficulty has been rounded to the units position.

$$\text{Deviation of AFSC position 01} = \frac{\Sigma \text{ all freq (pos 01) } * |\text{AFSC difficulty} - \text{t-score}|}{\text{Total assigned to position 01 of AFSC}}$$

Same for position 16

For AFSC 30534 (difficulty 88)   n = 32
     Average deviation (position 1) = 3.67   n = 12
     Average deviation (position 16) = 5.15   n = 20

For AFSC 32430 (difficulty 95)   n = 21
     Average deviation (position 1) = 7.5   n = 6
     Average deviation (position 16) = 22.93   n = 15

For AFSC 54230 (difficulty 58)   n = 31
     Average deviation (position 1) = 7.21   n = 14
     Average deviation (position 16) = 15.76   n = 17

For AFSC 54130 (difficulty 66)   n = 12
     Average deviation (position 1) = 11.93   n = 11
     Average deviation (position 16) = 11.87   n = 1

SUPPLEMENTARY

INFORMATION

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Errata

Number	First Author	Title
AFHRL-TR-76-87 (AD-A037 522)	Jensen	Armed Services Vocational Aptitude Battery Development (ASVAB Forms 5, 6, and 7)
AFHRL-TR-77-28 (AD-A044 525)	Hunter	Validation of a Psychomotor/Perceptual Test Battery
AFHRL-TR-77-53 (AD-A048 120)	Mathews	Screening Test Battery for Dental Laboratory Specialist Course: Development and Validation
AFHRL-TR-77-74 (AD-A051 962)	Mathews	Analysis Aptitude Test for Selection of Airmen for the Radio Communications Analysis Specialist Course: Development and Validation
AFHRL-TR-78-10 (AD-A058 097)	DeVany	Supply Rate and Equilibrium Inventory of Air Force Enlisted Personnel: A Simultaneous Model of the Accession and Retention Markets Incorporating Force Level Constraints
AFHRL-TR-78-74 (AD-A066 659)	Leisey	Characteristics of Air Force Accessions: January 1975 to June 1977
AFHRL-TR-78-82 (AD-A063 656)	Mathews	Prediction of Reading Grade Levels of Service Applicants from Armed Services Vocational Aptitude Battery (ASVAB)
AFHRL-TR-79-29 (AD-A078 427)	Hendrix	Pre-Enlistment Person-Job Match System
AFHRL-TR-79-83 (AD-A090 499)	Gustafson	Recursive Forecasting System for Person-Job Match

AD-A078427

Due to norming problems encountered with ASVAB Forms 5, 6, and 7, percentile scores derived from these test forms are in error. While the relative ranking of individuals by their percentile scores would not be affected by the norming errors, their absolute score values would be different. Therefore, descriptive statistics reported in the subject technical reports above are erroneous; other types of analyses in the report which use ASVAB percentile scores should be interpreted with caution.

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